

Farm economy in 2001 . . . Ag policy in Japan . . . Marketing lettuce . . . 21st Century Commission . . . Smart growth & agriculture

U.S. Farm Economy in 2001

While the general weakness in agricultural markets of the past couple of years continues, early signs of recovery are evident. Many farm sector indicators remain favorable, including asset values and debt levels, due in large part to record government payments. Global stocks of major crops are not excessive compared with use, farm prices are generally up, and reduced plantings in 2001 could lead to a further draw-down of stocks. However, the next couple of years are unlikely to see a strong rebound in farm prices and market income for major crops, unless global crop output drops significantly. In the longer term, continuing improvement in global economic growth will lead to stronger U.S. exports, further gains in agricultural commodity prices, and rising farm income.

Modest Rise in Food Prices This Year

Consumers can expect modest increases in food prices for the fourth year in a row, with the Consumer Price Index (CPI) for all food projected up 2 to 2.5 percent in 2001. For food prepared at home, the CPI in 2001 is projected to rise 2 to 2.5 percent while food away from home is expected up 2.5 to 3 percent. The downward trend in share of household disposable personal income spent on food should continue. Continuing large meat production, lackluster growth in exports, and a slowing domestic economy may pressure meat prices downward. A combination of reduced winter acreage in first-quarter 2001 and several bouts of sub-freezing weather in Florida have reduced supplies of fresh-market vegetables and raised produce prices.

Recommendations: Commission on 21st Century Production Agriculture

The Commission on 21st Century Production Agriculture, established under the 1996 Farm Act, released its report on January 31, 2001, concluding that the Federal government should develop policies and programs promoting global competitiveness of U.S. farm products. The Commission recommended specific legislative approaches to assure an income



safety net for producers, enhance risk management options, support conservation and environmentally beneficial practices, improve agricultural trade opportunities, revise individual commodity policies, and assist small and limited-resource farms.

Japan's Changing Agricultural Policies

Japan's government is revising its agricultural policies and programs to stem the decline in self-sufficiency in food production, and to ensure that its farm program expenditures will be exempt from reductions required under World Trade Organization rules. In July 1999, Japan adopted the Basic Law on Food, Agriculture, and Rural Policy, to review postwar agricultural policies and set up a policymaking scheme based on four principles: securing a stable food supply, fulfilling the multiple functions of agriculture (e.g., use of rice paddies to control flooding), sustainable development of agriculture, and promotion of rural areas. Major initiatives are underway to change the structure of farming and to make it more efficient. Japan's new policy stance explicitly recognizes that food security depends on continued imports and avail-

able stocks, as well as on maintaining domestic production capability.

Lettuce: In & Out of the Bag

Lettuce has never been more popular in the U.S. The average American consumed 33 pounds of lettuce in 2000—an all-time high. In response to growing consumer demand for variety, freshness, and convenience, and as a result of technological innovations in packaging materials, lettuce shippers now offer their customers everything from heads of iceberg to ready-to-eat salads. They have also adopted various business strategies to manage buyer demand for greater volume, broader product lines, and year-round availability.

Smart Growth: Implications for Agriculture in Urban Fringe Areas

"Smart growth" is a catch-all phrase to describe a number of land use policies to influence the pattern and density of new development. Smart growth directs development to designated areas (cities and older suburbs) through incentives and disincentives, without actually prohibiting development outside them or threatening individual property rights. While smart growth policies have implications for farmland outside as well as inside designated growth areas, landowners most likely to experience the effects are those in close proximity to existing population centers or planned growth areas. One of the greatest impacts of smart growth policies on local agriculture will be changes in farmland values because farm real estate dominates total farm assets.

Sheep & Lamb Inventory Continues To Decline

The U.S. sheep industry continues a long-term trend of negative growth that has seen the inventory shrink from a 1942 peak of 56 million head to 6.92 million head on January 1, 2001. This year's inventory is 2 percent below the level on January 1, 2000, and 50 percent below 1975, reflecting decreasing U.S. demand for wool and for lamb and mutton, and rising competition from Australia and New Zealand.

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U.S. Farm Economy in 2001

While the general weakness in agricultural markets of the past couple of years continues, early signs of recovery are evident. Many indicators continue to remain favorable, including farm asset values and debt levels, due in large part to record government payments. Global stocks of major crops are not excessive compared with use, farm prices are generally up from a year ago, and reduced plantings in 2001 could lead to a further drawdown of stocks.

However, the next couple of years are unlikely to see a strong rebound in farm prices and market income for major crops, unless global crop production drops significantly. Under current farm legislation and programs, assuming no supplemental payments, net cash income in 2001 is projected to be the lowest since 1994 and about \$4 billion below the average of the 1990s.

Commodity Markets Edge Up...

The U.S. economy continues to enjoy its longest expansion in history (although slowing considerably in recent months), characterized by strong income growth, low unemployment, surging productivity, and low inflation and interest rates. Production agriculture, while bolstered by the expansion, has been particularly vulnerable to foreign competition, a strong

dollar, economic recession in foreign countries, and increases in energy costs.

Prices of many agricultural commodities are beginning to pick up. In February, the index of prices received for all crops was up 5 percent from a year earlier and the index of prices for livestock was up 9 percent. Nevertheless, the commodity price recovery is generally from relatively low levels. For the 1999/2000 marketing year, the average price of soybeans was the lowest since 1972/73, the prices of corn and wheat the lowest since 1986/87, the price of rice the lowest since 1992/93, and the price of cotton the lowest since 1974/75. Cattle and hog prices were also relatively weak in 1999 but recovered more sharply than major crop prices in 2000. Milk prices were relatively strong in 1999 but fell to a 9-year low in 2000.

In addition to facing low agricultural commodity prices, many producers in the last several years have been confronted with weather-related problems and, more recently, with increases in prices for energy-related inputs. Sierra snowpack levels, which California's reservoirs depend on for electricity generation and farmland irrigation, continue below normal although improving.

In the past 3 years, Congress responded to potential sharp declines in farm income

and adverse weather by providing nearly \$25 billion in supplemental assistance to farmers and ranchers, greatly limiting the farm financial stress they would have otherwise faced. These payments, plus payments authorized under the 1996 Farm Act, pushed government payments to a record-high \$22 billion in calendar 2000 and Commodity Credit Corporation (CCC) outlays to a record \$32 billion in fiscal 2000.

In fiscal 2001, lower government payments are projected to reduce CCC outlays to slightly over \$20 billion. Had Congress not provided nearly \$9 billion in supplemental assistance in 2000, net cash income would likely have fallen to \$47.5 billion in calendar 2000, the lowest since the farm financial crisis of the mid-1980s. Instead, net cash income reached \$56.4 billion in 2000, nearly \$2 billion above the average of the 1990s.

... As Do U.S. Ag Exports

During the mid-1990s, a confluence of factors boosted agricultural exports: world gross domestic product (GDP) grew at an annual rate of 3 percent compared with less than 2 percent during the early 1990s, and global grain and oilseed production fell about 4 percent. In the mid-1990s, the value of U.S. agricultural exports rose sharply, as record-high grain prices pushed the value to a record \$60 billion in fiscal 1996, up by more than one-third from just 2 years earlier.

The surge in exports led many to conclude that U.S. agriculture was entering a period of long-term prosperity—continued and steady increases in world economic activity would be enough to keep farm prices strong even with normal weather. However, benign weather and strong prices led to an abrupt turnaround in world crop production, which increased sharply in 1996/97. In 1998, world economic growth, excluding the U.S., fell to a paltry 1.3 percent. The growth slowdown combined with continued strong crop production caused crop prices to decline sharply.

For bulk products such as feed grains, wheat, soybeans, cotton, and rice, export value declined one-third from 1996 to 2000. Accounting for nearly all of the

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drop in export value of bulk commodities were lower export prices, with export volume falling only slightly. In contrast, the export value of high-value agricultural products (total ag exports minus bulk commodities) remained nearly steady at about \$32 billion during 1996-2000.

In 2001, the value of bulk exports is forecast to increase \$0.5 billion to \$18.3 billion, remaining well below 1996's \$28 billion, while volume is expected to be just under 1996's 119.4 million tons. The export value of high-value agricultural products is forecast to increase to \$34.7 billion in 2001, bringing total export value to \$53 billion this year. This is up from the recent low of \$49 billion 2 years ago, but still well below the 1996 record.

The turnaround in several key macroeconomic indicators makes the outlook for higher exports more positive than it has been in some time. World GDP excluding the U.S. grew nearly 4 percent in 2000, the largest growth rate in more than a decade. In 2001, with the economic slowdown in Japan, world GDP excluding the U.S. is expected to slow from last year's high rate. However, many countries that were in recession in 1998 and 1999 are now registering strong growth rates. Following the 1997/98 Asian financial crisis, South Korea's economy grew nearly 11 percent in 1999 and over 9 percent in 2000, and economic growth in Southeast Asian countries rose to 3.6 percent in 1999 and to almost 6 percent last year. In addition, several Latin American countries registered positive growth in 2000 after being in recession in 1999.

Another key factor for U.S. exports is the U.S. exchange rate. The value of the dollar has increased sharply in the last several years, raising the cost of U.S. farm products to foreign buyers and the cost of U.S. agricultural products relative to those of competitors. Between April 1995 and September 2000, the U.S. dollar appreciated by 25 percent against currencies of *countries purchasing* U.S. agricultural products, reversing about a decade in which the value of the dollar declined relative to other currencies. Over the same period, the U.S. dollar appreciated 42 percent relative to currencies of U.S. agricultural *competitors*. Declining interest rates and a slowing economy should weaken

U.S. Farm Economy at a Glance

	1996	1997	1998	1999	2000	2001
\$ billion						
Cash receipts	199.1	207.6	196.6	188.6	196.0	200.0
Government payments	7.3	7.5	12.2	20.6	22.1	14.1
Cash expenses	159.8	168.6	167.2	170.4	178.0	179.5
Net cash income	57.6	58.5	55.4	54.6	56.4	50.7
Farm debt	156.1	165.4	172.9	176.4	180.6	182.8
Farm assets	1,004.8	1,053.1	1,085.5	1,116.6	1,121.0	1,132.1
Percent						
Debt-to-asset ratio	15.5	15.7	15.9	15.8	16.1	16.1
\$ billion						
Agricultural exports	59.9	57.4	53.7	49.2	50.9	53.0
Agricultural imports	32.5	35.7	36.8	37.3	38.9	40.0
1995 = 100						
Value of dollar*	105.1	110.1	119.2	117.5	120.2	113.8
Percent change						
Consumer price index for food	3.3	2.6	2.2	2.1	2.3	2-2.5

2000 estimate, 2001 forecast.

*Agricultural trade-weighted, inflation-adjusted.

Economic Research Service, USDA

the dollar in 2001, making U.S. agricultural products moderately more attractive to foreign buyers.

Farm Income to Drop

Farm cash receipts are forecast to reach \$200 billion in 2001, up \$4 billion from last year. This would be the second-highest level of farm cash receipts, surpassed only by the 1997 record (nearly \$208 billion). Crop receipts in 2001 are projected to be down \$11 billion from 1997, while livestock receipts are forecast to be up about \$3 billion. Compared with last year, crop receipts are forecast to increase by \$3.6 billion to slightly over \$100 billion, while livestock receipts are projected to be about unchanged at slightly under \$100 billion.

These aggregate figures mask steep declines in cash receipts and income for major crops. Cash receipts for grains, soybeans, and cotton, projected to increase slightly to \$45 billion in 2001, will be down from a record \$57 billion in 1997. Dairy receipts are forecast to be up from last year.

Assuming no supplemental assistance for 2001 crops, net cash income is projected to decline from \$56.4 billion last year to under \$51 billion in 2001, as production

expenses continue to rise and government payments decline. Increases in petroleum prices and interest rates along with higher prices for other production inputs, including hired labor, increased farmers' production expenses by 4 percent or \$7.6 billion in 2000, with higher fuel and oil prices accounting for over one-third of the increase. In contrast, farm production expenses rose only 1 percent from 1997 to 1999.

In 2001, farmers' total cash production expenses are forecast to increase \$1.5 billion to a record \$179.5 billion. Even though total planted acreage is expected to fall in 2001, higher natural gas prices will raise expenses for nitrogen fertilizer. Expenses for hired labor, repairs, and marketing could also continue to trend up in 2001. Fuel expenses are expected to be about unchanged from last year, as petroleum prices moderate later this year. Despite recent interest rate reductions by the Federal Reserve, farm business interest expenses are projected to remain about steady in 2001. About two-thirds of bank nonreal estate loans made in 2000 are variable-rate loans, but these loans adjust at regularly scheduled intervals and lag the Federal Reserve rate.

Government payments have offset much of the decline in cash receipts for major

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crops in the past few years, helping to maintain producers' cash flow. Direct government payments to farmers rose from under \$8 billion in 1997 to a record \$22 billion last year. In 1997, farmers received \$6 billion in production flexibility contract (PFC) payments and about \$2 billion in conservation program payments. In 2000, direct government payments included nearly \$9 billion in supplemental assistance, nearly \$5 billion in PFC payments, \$6.4 billion in loan deficiency payments, and \$2 billion in conservation program payments. Loan deficiency payments are available to producers whenever the prevailing market price (world price for cotton and rice) for a particular commodity falls below the price support loan rate. Producers received no loan deficiency payments in 1997 because prevailing prices exceeded the announced loan rates for program crops (feed grains, wheat, upland cotton, and rice) and oilseeds.

Because government payments are tied to both historical and current production of major crops, the largest farming operations receive most of the payments. (PFC payments are based on historical production, while loan deficiency payments and gains on marketing assistance loans are based on current production). In 1999, the 16 percent of farming operations with annual sales above \$100,000 received nearly three-fourths of farm program payments.

In calendar 2001, government payments are projected to decline about \$8 billion to slightly over \$14 billion. This forecast includes no supplemental aid for 2001 crops, since legislation authorizing supplemental assistance for 2001 crops has not been enacted by Congress. Scheduled annual reductions in PFC payments under the 1996 Farm Act, as well as lower loan deficiency payments reflecting improving prices for major crops, are forecast to reduce government payments by \$2.5-\$3 billion in 2001. In addition, with no supplemental aid legislation in place for the 2001 crops, emergency assistance to farmers and ranchers is projected to fall from nearly \$9 billion last year to about \$3.5 billion in 2001. The \$3.5 billion in emergency assistance was authorized by Congress last year to offset crop and market losses in 2000 and will be dispersed in 2001. The farm income situation in 2001 is not unlike that in recent years; this year

some of the drop in government payments is expected to occur through lower loan deficiency payments that will be made up in greater returns from the market.

Should there be an income safety net for farmers? The Commission on 21st Century Production Agriculture addresses this and other issues. See page 20.

Absent new legislation, the regions and crops that have been most dependent on government payments are likely to see the greatest decline in farm income in 2001. The major field crops have had particular market difficulty in the past few years. Net cash income (excluding government payments) on a crop-year basis for the major field crops—wheat, rice, corn, sorghum, oats, barley, cotton, and soybeans—was low for the 1999-2000 crops and projected to remain low for the 2001 crops. Direct government payments accounted for three-fourths of net cash income for major field crops in 1999 and more than two-thirds in 2000.

For 2001, net cash income for major field crops is projected to fall by over \$5 billion, declining from over \$25 billion for the 2000 crop to less than \$20 billion. The decline is slightly less than the amount of market loss assistance Congress authorized last year for major field crops.

Farm Finance Situation Remains Relatively Strong

A national farm financial crisis has not occurred, in large part because of record government payments and increased off-farm income. Farm numbers have been fairly stable in recent years. The proportion of nonperforming farm loans has risen only slightly, the debt-to-asset ratio remains at about 16 percent (down from 23 percent during the mid-1980s farm financial crisis), and farm real estate values and land rental rates generally continue to rise. In 1999, U.S. farmland values rose 3 percent nationally and were up in 42 states, and cash rents paid for 2000 were up in 40 states. Bankers in the Chicago Federal Reserve District, for

example, reported that land values in the district rose 7 percent over the 12-month period ending on October 1 of last year.

While the national picture appears secure, regional and sectoral problems persist. The combination of low prices and structural change have caused the number of dairy and hog operations to decline, and adverse weather in the Southeast, Southern Plains, and elsewhere has helped create regional pockets of farm financial stress.

Farm debt rose 2.4 percent in 2000, surpassing \$180 billion for the first time since 1984. In 2001, farm debt is forecast to increase to slightly under \$183 billion. Even though farmers' balance sheets are much improved from the mid-1980s, the projected drop in farm income lessens farmers' ability to repay existing debt.

A useful indicator of financial stress is debt held by farms as a percentage of the maximum feasible debt that farms can take on, which is referred to as debt repayment capacity utilization (DRCU). Maximum feasible debt is a calculation based on net farm income, the interest rate, an assumed 7-year average repayment period for debt, and bankers' guidelines on the maximum level of income that should be used for principal and interest. In 2000, U.S. farmers, on average, used a little over 60 percent of their maximum feasible debt, and this figure is forecast to increase to 65 percent in 2001.

The DRCU analysis may be taken a step further by looking at how this measure of debt stress is distributed among farming operations. Of the 2.2 million U.S. farms, about one-quarter (512,000 operations) are commercial farm businesses, selling at least \$50,000 of output per year. These farms account for 90 percent of total U.S. production.

Commercial farms that cannot service their debt and that stop performing on their loans usually have debt equal to at least 240 percent of maximum feasible debt. In 1998, the number of farming operations in this category rose, but the number fell in 1999. Weak markets probably led producers to use government payments to pay down debt. In both 1999 and 2000, about 50,000 of the nation's

512,000 commercial farm businesses had DRCU of 240 percent or more. In 2001, the number is forecast to increase to 70,000.

Record-high government assistance to farmers is the most obvious reason farm financial stress has been limited. Another reason is the strong nonfarm economy, which has helped expand off-farm income opportunities for farm households. Earnings of farm operator households from off-farm sources averaged an estimated \$60,000 in 2000, up from less than \$36,000 in 1992. In recent years, about 90 percent of total income of the average farm household comes from off-farm sources, and the average income of farm operator households, including income from off-farm sources, has been above the average for all U.S. households. Off-farm jobs in rural areas are a major reason why the number of farms stabilized at 2.2 million in the 1990s.

Major Crop Markets Show Signs of Improvement

Prices of major crops for the 2000/01 season are expected to register modest improvement from last year's 15- to 25-year lows, reflecting another year of large global production of major crops and ample stocks. Given no major weather disruptions in the world's major crop growing regions in 2001/02, further expansion in global demand for agricultural products—e.g., corn in Asia—is expected to lead to continued increases in major crop prices over the next several months and into the 2001/02 marketing year.

While it is too early to predict a substantial recovery in major crop prices in 2001, global stock levels going into the 2001 season are projected to be down sharply from a year earlier. At the end of this season, global grain stocks are projected to be down 10 percent from a year earlier and the lowest since 1996/97. As a result, world prices could move up sharply if weather adversely affects global crop production over the next several months.

U.S. winter *wheat* plantings last fall were down 5 percent from a year earlier and the lowest since 1971. While late plantings could reduce winter wheat yields,

Trade-Generated Gains Strengthen Agricultural Sector In Long Run

USDA's new longrun (10-year) baseline projections indicate continuing recovery in the agricultural sector over the next several years from the market situation in the late 1990s that resulted in generally weak agricultural commodity prices. For the remainder of the period, continuing improvement in global economic growth leads to stronger U.S. exports, further gains in agricultural commodity prices, and rising farm incomes.

For several years in the late 1990s, farmers in the U.S. and abroad harvested large crops, while the global financial crisis weakened world agricultural demand. Strong foreign competition in a weakened global trade setting reduced the value of U.S. agricultural exports and market cash receipts to U.S. farmers. Net farm income was maintained at levels near the average of the 1990s only through large government marketing loan benefits and by additional funds provided to the sector through emergency and disaster assistance legislation.

Although some lingering effects of the global economic crisis remain, the general recovery underway in crisis countries has strengthened global demand and trade, and U.S. agricultural exports have risen. Nonetheless, the buildup of global supplies in the late 1990s keeps agricultural prices under pressure over the next several years, with marketing loan benefits continuing to have an important role in the U.S. farm sector. U.S. farm income declines in the initial years of the baseline, largely reflecting an assumption of a reduction in direct government payments to the sector from high levels of the past several years.

Longer run developments in the agricultural sector reflect continuing macroeconomic improvement. Structural reform in countries most affected by the global financial crisis of the late 1990s leads to strengthening world economic growth, particularly in developing countries, providing a foundation for further gains in trade and U.S. agricultural exports. Expanding production in a number of foreign countries (e.g., Brazil and Argentina), however, results in continued strong export competition throughout the baseline period. Nonetheless, growth in trade leads to rising market prices, increases in farm income, and improvement in the financial condition of the U.S. agricultural sector.

Consumer food prices are projected to continue a long-term trend of rising less than the general inflation rate. The trend in consumer food expenditures toward a larger share for meals eaten away from home is expected to continue.

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The USDA baseline provides longrun projections for the agricultural sector through 2010. Projections cover agricultural commodities, agricultural trade, and aggregate indicators of the sector such as farm income and food prices. The projections are based on specific assumptions regarding macroeconomic conditions, policy, weather, and international developments. The baseline assumes no shocks due to abnormal weather or other factors affecting global supply and demand. The 10-year baseline scenario assumes continuation of current agricultural law of the 1996 Farm Act. The baseline also assumes no further ad hoc emergency and disaster assistance.

The baseline projections are one representative scenario for the agricultural sector for the next decade. As such, the baseline provides a point of departure for discussion of alternative farm-sector outcomes that could result under different assumptions. The projections in the USDA baseline report, which reflect a composite of model results and judgmental analysis, were prepared in September through November 2000.

USDA's complete 2001 baseline projections are available at:
<http://www.ers.usda.gov/briefing/baseline/>

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weather conditions this spring will be the major factor in determining wheat yields. Reduced wheat supplies in 2001/02 are expected to lead to the second consecutive year of reduced carryover and rising farm prices.

In 2001, higher natural gas prices will increase **corn** producers' fertilizer and irrigation costs. These higher costs are expected to lower corn plantings in 2001. Assuming normal weather, lower acreage coupled with expanding ethanol use and another year of strong export opportunities supported by continued global economic growth could tighten ending stocks, strengthening market prospects for corn in 2001/02.

Less fall-planted wheat, higher fertilizer prices, planting flexibility, and the benefits of the soybean marketing loan program provide an incentive for further expanding **soybean** plantings in 2001. Assuming normal weather, higher acreage could lead to another year of record soybean production and of rising carryover, even though total use could also reach another record in 2001/02. The European Union's ban on the use of meat and bone

meal in animal feeds could raise soybean meal exports, but foreign competition is likely to remain intense. Under pressure of rising stocks, soybean prices could decline in 2001/02.

U.S. **red meat and poultry** production posted a 1-percent gain in 2000. Despite last year's record in total red meat and poultry production, cattle and hog prices were up as demand for meat was strong.

In 2001, meat production is expected to be unchanged—gains in pork and poultry production are offset by declines in beef following several years of heavy heifer slaughter. Declining beef production is expected to push cattle prices higher, while increasing pork production could pressure hog prices, especially in the last quarter of 2001. Broiler producers, in response to continued low prices through most of 2000, have begun to reduce their rate of expansion, and broiler prices in 2001 are projected to be about unchanged from last year after falling 3 percent in 2000. Some recovery in milk prices is also expected as the surge in milk production over the past 2 years dissipates. Livestock, poultry, and dairy producers

should benefit from another year of low feed costs.

The outlook for **horticultural crops** is very uneven. Cash receipts for these crops as a group are projected to be up in 2001, and the value of exports is forecast to reach a record \$11 billion in fiscal 2001. However, prices for some horticultural crops are being adversely affected by large supplies. For instance, prices of apples, pears, and potatoes were down at least 15 percent, and prices of lemons and grapefruit were off more than 50 percent in February, compared with a year earlier.

Over the next several years, the agricultural sector is expected to continue to recover from the current weak market situation. Increases in exports and domestic use are expected to boost farm cash receipts, but farm income could fall below recent levels during the next few years, as gains in cash receipts fail to offset lower government payments (assuming no additional supplemental assistance). **AO**

Keith Collins
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In upcoming issues of *Agricultural Outlook*

- Field crop plantings in 2001
- AO's ongoing series on farm policy issues and proposals
- Farm credit use in 2001
- Government payments to agriculture: accounting for the funds

Briefs

Food & Marketing

Modest Rise in Food Prices This Year

Consumers can expect modest increases in food prices for the fourth year in a row, with the Consumer Price Index (CPI) for all food projected to be up 2 to 2.5 percent in 2001, compared with 2.3 percent in 2000. This continues a long-term trend of food prices rising slightly less than the general inflation rate, forecast at 3 percent in 2001. For food prepared at home, the CPI in 2001 is projected to rise 2 to 2.5 percent, with food away from home up 2.5 to 3 percent.

In 2000, sales of food at home are forecast to increase 5.1 percent, while food-away-from-home sales are forecast to increase 9.7 percent in 2000. As a result, expenditures for all food in 2000 could increase to \$842.7 billion from \$788.6 billion in 1999. Rising incomes are chiefly responsible for the increased spending on food away from home, which could amount to 48 percent of total food expenditures in 2000. Higher energy prices did not translate into higher food prices in 2000, largely because transportation and energy costs together are less than 10 percent of the total food marketing bill (which constitutes 80 cents of every dollar of consumers' food expenditures, compared with 20 cents that goes to the farmer).

Food price changes are key to shifts in the proportion of income consumers spend for food. In 1999, this proportion was 10.4 percent of household disposable personal income, with 6.2 percent for food at home and 4.2 percent for food away from home. The downward trend in the share of household disposable personal income spent on food should continue into 2000 and 2001. In 2001, consumer spending is expected to grow by 3 percent but will be held in check by a tight labor market, more limited credit, and higher energy prices.

Meats. U.S. red meat and poultry production posted nearly a 1-percent gain in 2000, and retail prices were higher for all meats, especially beef and pork. In 2001, meat output is expected to be unchanged, with poultry, hog, and turkey producer prices remaining steady or declining.

Continuing large meat production, lackluster export growth, and a slowing domestic economy may pressure wholesale and retail prices downward.

Beef and veal. Beef production was up 1.5 percent in 2000, with prices for retail Choice beef at a record \$3.06 a pound. The beef CPI rose 6.4 percent in 2000 and is expected to increase 3 to 4 percent in 2001. First-half 2001 beef output is likely to decline 3 to 4 percent from a year earlier, while second-half production may decline 5 to 6 percent. The slowing economy is expected to dampen demand for higher quality cuts of beef, which led to the record-setting retail prices in 2000.

Pork. Retail pork prices rose a sharp 7.3 percent in 2000, with the 2001 CPI expected to increase 2 to 3 percent. Commercial pork production in 2001 is forecast at 19.3 billion pounds, up almost 2 percent from 2000, and, if realized, would be just above the 1999 record. Per

capita pork and competing meat consumption should stay about the same in 2001. The slowing economy and sharply higher energy costs may temper consumer demand for beef and pork this season.

Poultry. The CPI for poultry increased 1.2 percent in 2000, with a rise of 1 to 2 percent expected in 2001. Broiler production in 2001 is forecast at 31 billion pounds, up about 1.5 percent from 2000. Responding to low prices through most of 2000, broiler producers have indicated that they will slow production growth in 2001. With strong exports to the three largest markets (Russia, Mexico, and China/Hong Kong) and a number of smaller markets, U.S. broiler exports surged to over 5.5 billion pounds in 2000 and are expected to be 5.7 billion pounds in 2001. Competition in export markets is expected to continue driving the poultry industry's ability to efficiently convert feed to meat, lowering its cost relative to beef and pork.

Fish and seafood. The CPI for fish and seafood was up 2.8 percent in 2000, with an expected increase of 2 to 3 percent in 2001. U.S. per capita seafood consump-

Changes in Food Price Indicators, 1999 through 2001

	Relative weights*	1999	2000	Forecast 2001
	Percent	Percent change		
All items		2.2	3.3	3.0
All food	100.0	2.1	2.3	2 to 2.5
Food away from home	37.2	2.5	2.4	2.5 to 3
Food at home	62.8	1.9	2.3	2 to 2.5
Meats	10.8	0.5	5.9	2 to 3
Beef and veal	5.0	2.0	6.4	3 to 4
Pork	3.7	-1.8	7.3	2 to 3
Other meats	2.2	1.0	2.6	2 to 3
Poultry	3.1	0.5	1.2	1 to 2
Fish and seafood	2.2	2.0	2.8	2 to 3
Eggs	0.8	-5.4	3.0	6 to 7
Dairy products	6.9	5.8	0.7	1 to 3
Fats and oils	1.9	1.0	-0.6	1 to 2
Fruits and vegetables	9.6	2.5	0.7	2 to 3
Fresh fruits and vegetables	7.5	2.8	-0.7	3 to 4
Fresh fruits	3.8	8.0	-3.0	1 to 2
Fresh vegetables	3.7	-3.0	4.8	4 to 6
Processed fruits and vegetables	2.1	2.1	1.1	1 to 2
Sugar and sweets	2.4	1.4	1.1	1 to 2
Cereal and bakery products	10.0	2.2	1.8	2 to 3
Nonalcoholic beverages	6.7	1.0	2.6	2 to 3
Other foods	8.4	2.1	2.0	2 to 3

*Bureau of Labor Statistics estimated weights as share of all food, December 2000.

Sources: Historical data, Bureau of Labor Statistics; forecasts, Economic Research Service.

Economic Research Service, USDA

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tion has remained flat, between 14.8 and 15.2 pounds of edible meat per year, with population growth accounting for increases in total domestic seafood consumption. A strong U.S. economy in 2000 boosted away-from-home food demand as people traveled and ate out more. This was especially important for seafood, as a large percentage is consumed at restaurants. More than 50 percent of fish and seafood consumed in the U.S. in 2000 came from imports, with another 20 to 25 percent from U.S. farm-raised production.

Eggs. Retail egg prices increased 3 percent in 2000, with an increase of 6 to 7 percent expected in 2001. Table-egg production rose 2 percent in 2000, while hatching-egg production was flat. Retail egg prices were highest during the fourth quarter, reflecting seasonal demand as well as supplies that were only 2 percent above third-quarter supplies. Per capita consumption is expected to reach 258 eggs in 2001, down slightly from 2000.

Dairy and related products. Prices rose 0.7 percent in 2000, following a 5.8-percent increase in 1999. Strong consumer demand for dairy items, notably gourmet ice cream, cheese, and butterfat products, is expected to continue this year, with the CPI for dairy products rising 1 to 3 percent. Growth in milk output is expected to ease slightly in 2001, after consumer demand outstripped supplies in 1998 and 1999. Most fluid milk is still sold at retail, but cheese and butter are used mostly by away-from-home eating establishments or by manufacturers of processed foods. Greater away-from-home dining has reduced fluid milk sales as people tend to order other beverages in restaurants.

Fats and oils. Prices fell 0.6 percent in 2000, but are expected to increase 1 to 2 percent in 2001. The decrease in the 2000 index was due largely to lower retail prices for butter, which accounts for 31 percent of the fats and oils index. The remaining items in the fats-and-oils index are highly processed foods, with price changes influenced by the general inflation rate in addition to U.S. and world supplies of vegetable oils.

Fresh fruits. The 1999/2000 citrus crop rebounded in California, leading to a 3-percent decrease in the fresh fruit price

index in 2000. Large supplies of other major fruits also contributed to a decrease in the fresh fruits CPI. With the 2000/01 citrus crop and supplies of noncitrus fruits expected to be about the same as last year, and with continued strong U.S. consumer demand for fresh fruits, the fresh fruits CPI is expected to increase only 1 to 2 percent in 2001.

Fresh vegetables. The CPI for fresh vegetables increased 4.8 percent in 2000 due to lower production and strong demand for fresh vegetables. Fresh-market vegetable harvested area was estimated down about 1 percent from 1999 in response to lower grower prices.

A combination of reduced winter acreage in first-quarter 2001 and several bouts of sub-freezing weather in Florida have reduced fresh-market vegetable supplies—particularly green peppers, snap beans, squash, eggplant, tomatoes, and cucumbers. Low prices for leafy green and other cool-season vegetables from California have helped offset higher prices for Florida vegetables. Retail prices for potatoes, the most heavily weighted item in the fresh vegetable CPI, are low this year due to a record-large fall crop. While imports will help fill some of the supply gaps, the impact of the Florida freeze on prices may continue until April. However, vegetable growers have indicated they expect harvested acreage to be down 2 percent in winter 2000/01. Combined with the Florida freeze, this should raise the fresh vegetable index another 4 to 6 percent in 2001.

Processed fruits and vegetables.

Adequate supplies of most fruits and vegetables for processing limited the CPI increase for processed fruits and vegetables to 1.1 percent in 2000. With lower supplies of processed vegetables and adequate supplies of frozen concentrate orange juice and other fruit expected in 2001, the CPI for processed fruits and vegetables is expected up 1 to 2 percent.

Sugar and sweets. Domestic sugar production for 1999/2000 was a record 9 million tons, more than 600,000 tons above the previous marketing year. Low prices for soybeans, corn, wheat, barley, and rice led farmers to shift acreage to sugar. With relatively low inflation and increased output, the CPI for sugar and sweets

increased only 1.1 percent in 2000. While demand for sugar and sugar-related products continues to rise, large U.S. sugar supplies are outpacing demand. Per capita consumption of caloric sweeteners increased almost 20 pounds per person from 1990 to 2000, partly because inflation-adjusted retail prices dropped dramatically—from 33 cents/lb. in 1990 to 26 cents/lb. in 2000—and also because of increased spending for away-from-home eating and consumers' willingness to treat themselves. With large sugar supplies expected again in 2000/01, the CPI for sugar and sweets is expected to increase a moderate 1 to 2 percent in 2001.

Cereal and bakery products. These items account for almost 16 percent of the at-home food CPI. With grain prices lower and inflation-related processing costs modest, the CPI for cereals and bakery products increased 1.8 percent in 2000. Most of the costs to produce cereal and bread products are for processing and marketing—more than 90 percent in most cases—so farm ingredients are a relatively minor cost consideration. With competition among producers and consumer demand for bakery products expected to remain fairly strong, the CPI is forecast up 2 to 3 percent in 2001.

Nonalcoholic beverages. The CPI for nonalcoholic beverages increased 2.6 percent in 2000 and is forecast to increase another 2 to 3 percent in 2001. Coffee and carbonated beverages are the two major components, accounting for 28 and 38 percent of the index. In 2000, retail prices were 1 percent higher for ground roast coffee and up 4 percent for soft drinks. World coffee production in 2000/01 is forecast record-high, nearly 2 percent above last year. Up to 80 percent of U.S. imports are arabica beans, and 15 to 20 percent are robustas—mainly for soluble (instant) coffee. Recent near-record production in Brazil, the largest producer of arabica, should lead to larger U.S. stocks and continued moderate consumer prices.



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For more information on food prices, see the Economic Research Service briefing room at www.ers.usda.gov/briefing/CPIFoodAndExpenditures/

Livestock, Dairy, & Poultry**Sheep & Lamb Inventory Continues To Decline**

The U.S. sheep industry continues a long-term trend of negative growth that has seen the inventory shrink from a 1942 peak of 56 million head to 6.92 million head on January 1, 2001. This year's inventory is 2 percent below the level on January 1, 2000, and 50 percent below 1975, reflecting decreasing U.S. demand for wool and for lamb and mutton and rising competition from Australia and New Zealand.

Texas, the largest sheep-producing state, saw an 8-percent drop in inventory during 2000, while Wyoming (third largest) saw a 7-percent decline. Several states did register gains, including California, Oregon, Nebraska, and Indiana. But drought conditions in the Southern Plains and western states contributed to a relatively large decline (5 percent) in national breeding stock.

Commercial production of lamb and mutton has mirrored the long-term decline in inventory. In calendar 2001, production of lamb and mutton is expected to total about 217 million pounds, down 7 percent from 2000 and 46 percent from 1975. With production down, farm prices of lambs are expected to average in the low \$80's per cwt this year, up about \$1 from 2000. Based on seasonal price patterns, market lamb prices are expected to peak during the Easter/Passover season, averaging \$81-\$85 in the second quarter.

In recent years, rising U.S. imports have offset declining lamb and mutton production, keeping per capita consumption stable. Imports, which account for about one-third of U.S. consumption, are nearly all from Australia (59 percent) and New Zealand (39 percent). Mutton and lamb enjoy a niche market, with regular con-

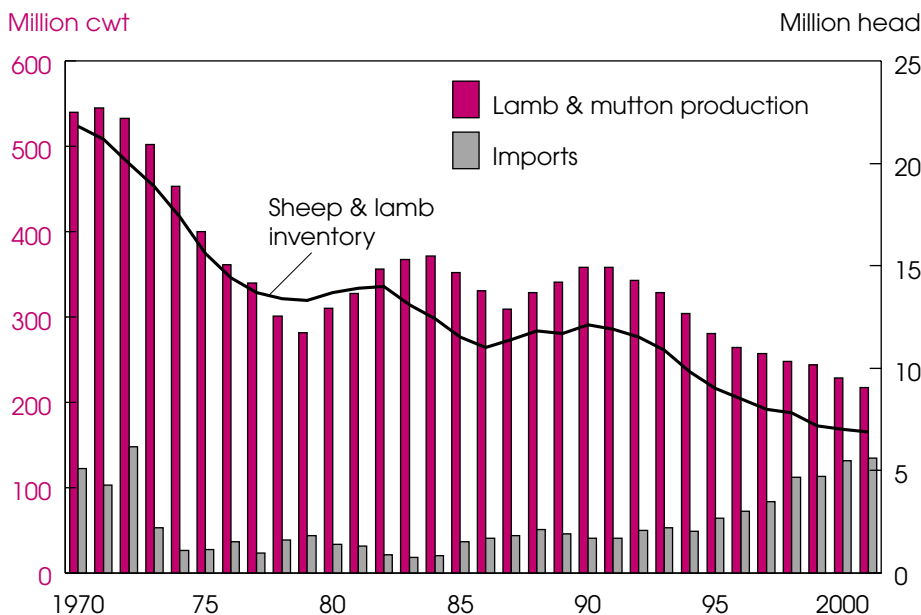
sumption concentrated in ethnic groups of Middle Eastern, African, Latin American, and Caribbean descent.

Following the import rise in the mid-1990s, the U.S. established in July 1999 a 3-year tariff-rate quota (TRQ). The *ad valorem* duty for in-quota amounts (up to 70.2 million pounds) was 9 percent in the first year (July 1999-June 2000) and is reduced by 3 percentage points for each subsequent year. The over-quota duty was 40 percent in the first year. In the second and third years, in-quota import levels will rise to about 72.1 million pounds and about 74 million pounds, respectively, with over-quota tariffs at 32 percent and 24 percent. In 2001, U.S. lamb and mutton imports are expected to be up about 5 percent from 2000 to 135 million pounds as import restrictions are reduced.

In October 1999, New Zealand and Australia filed complaints against the U.S. to the World Trade Organization (WTO). A WTO panel ruled in favor of New Zealand and Australia in December 2000, recommending that the U.S. bring its import safeguard measures on lamb meat (the TRQ) into conformity with its WTO obligations concerning safeguards. The U.S. has since appealed the ruling, and the results of the appeal are pending.

AO

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Lamb and Mutton Production Continues Long-Term Decline While Imports Climb

Commercial production, 2001 forecast.
Economic Research Service, USDA

**Cattle imports from Mexico—
what's driving them?**

... in an upcoming issue of
Agricultural Outlook

Commodity Spotlight



International Fresh-Cut Produce Association

Lettuce: In & Out of the Bag

Lettuce has never been more popular in the U.S. The average American consumed 33 pounds of lettuce in 2000—an all-time high. This growing market has spurred the U.S. lettuce industry to reinvent itself over the past decade. In response to consumer demand for variety, freshness, and convenience, and as a result of technological innovations in packaging materials, lettuce shippers now offer customers everything from heads of iceberg to ready-to-eat salads.

Today's lettuce shippers market their wares through a variety of outlets: grocery stores, foodservice operations, produce wholesalers, mass merchandisers, and exporters. While some firms specialize, others consciously diversify across marketing channels. Operations range in scope from firms that simply wash, core, and wrap lettuce to large, sophisticated processing plants that bag salad blends and salad kits in special, patented films.

California & Arizona Dominate the Market

The U.S. produces more lettuce than any other country except China. Nearly all (more than 99 percent) of the lettuce consumed in the U.S. is produced domestically. Just two states, California and Arizona, produce 96 percent of the country's commercial iceberg (also known as crisphead

or head) and romaine lettuce and 98 percent of its leaf lettuce.

Overall, U.S. lettuce production has risen 16 percent since 1992. The soaring popularity of romaine lettuce, a staple of Caesar salads and bagged salad mixes, has led to a huge increase in production: 162 percent since 1992. Production of leaf lettuce (up 37 percent) has also been strong, due largely to the enduring popularity of salad bars and bagged salad blends. Iceberg lettuce has experienced a relative fall from favor, with production increasing only 2 percent since 1992. As the popularity of other varieties has risen, iceberg's share of U.S. lettuce production has declined from 84 percent in 1992 to 73 percent in 2000.

A relatively small number of firms coordinate the growing, processing, and transport of lettuce. Nearly all the major lettuce shippers have headquarters and year-round sales offices in the Salinas, California area. By organizing lettuce production in precise sequences, these firms have ensured that lettuce can be grown domestically throughout the year. Iceberg lettuce, for instance, is produced in the Salinas Valley from April through October, then briefly in Huron, California, before a new growing season begins in the desert areas of Yuma, Arizona, and California's Imperial Valley, running from

November through March. Huron provides another brief production bridge between the desert and the Salinas Valley in March and April. Leaf lettuce can follow a slightly different sequence, which can include planting in California's Santa Maria and Coachella valleys.

Most shippers of iceberg, leaf, and romaine lettuce handle other vegetables as well—sometimes as many as 75 different types, including broccoli, cauliflower, celery, green onions, radishes, and spinach—so that they can offer their customers one-stop shopping. Some of these shippers also specialize in crops that have smaller markets, such as artichokes, asparagus, cactus pears, rapini, and organic vegetables.

Iceberg, still the most widely used variety of lettuce in the U.S. (24.9 pounds consumed per capita in 2000), is second only to the potato (51 pounds consumed per capita last year) as the most popular fresh vegetable in the U.S. But while Americans used nearly 6.9 billion pounds of iceberg in 2000, per capita use has declined 13 percent since the 1989 peak. Decline in the iceberg market has been more than offset by increased demand for romaine and leaf lettuce. As Americans have tried to improve their diets, they have become more open to trying new varieties of lettuce (red leaf, bib, butterhead, and others) and more interested in buying conveniently bagged salad blends and kits. The result: per capita use of leaf and romaine lettuce has more than doubled since the beginning of the 1990s, culminating in a record 8.3 pounds in 2000.

From Farm to Market: The Processing Picture

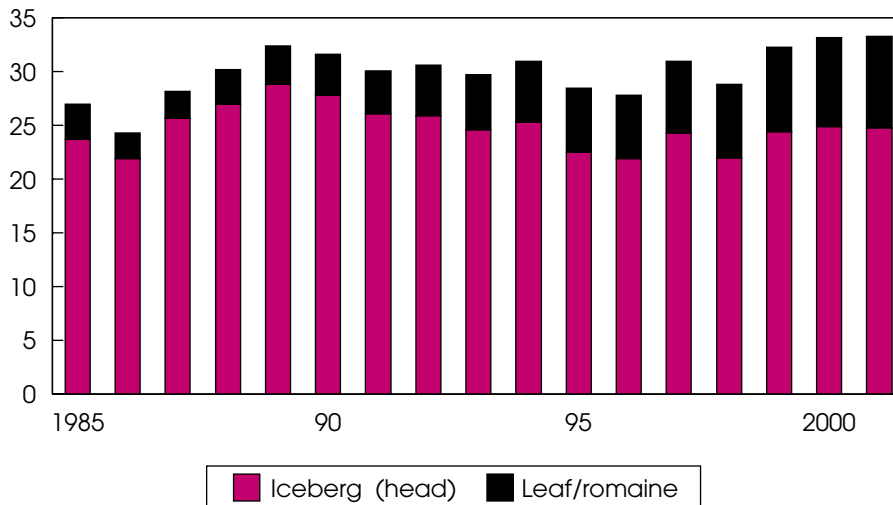
Most shippers process their lettuce in one of three ways. Lettuce sold as a *commodity* undergoes virtually no processing; *value-added* lettuce is typically washed, bagged, and sold ready-to-serve; and *fresh-cut* (also known as fresh-processed) lettuce appears in bagged salad blends or kits. Lettuce marketed as a commodity is generally sold in bulk and under brands not widely recognized by consumers.

A commodity such as bulk spring mix—created by combining several different kinds of leaf lettuce—is not considered to be a “value-added” product. True value-

Commodity Spotlight

U.S. Per Capita Lettuce Consumption Is Record-High

Lbs. per person



Farm weight. 2001 forecast.

Economic Research Service, USDA

added products require more processing. For instance, although broccoli crowns or leaf lettuce sold in bulk are considered commodity products, broccoli florets that are washed and sold in 16-ounce packages, ready to serve or cook, are value-added, as are hearts of romaine. Most value-added products come bagged in simple cellophane, not in the sophisticated films used to protect salad mixes and kits. Although some value-added products may not bear universal product codes (UPCs), they will often sport PLU (price lookup) codes that are not scanned but are entered by hand at the cash register.

Value-added products require a small amount of processing, and thus require relatively little in the way of capital investment. Many value-added processing operations can be performed in modified packing sheds, with a modest amount of equipment. However, makers of fresh-cut products such as bagged salads must make substantial capital investments in plants and specialized machinery.

Because of these high capital costs—more than \$20 million for a central or regional processing plant—smaller producers may have difficulty entering the market. Other costs include special packaging films that manage transpiration and respiration rates

and extend shelf life; research and development of new films; and sophisticated merchandising. Producers of fresh-cut let-

tuce products must follow specific procedures in the “cold chain” that extends from the processing plant to the retail display case, and always be on the lookout for ways to reduce delivery times from regional processing plants. Fresh-cut products are marketed using consumer-recognized brand names and have UPC codes that are scanned by supermarket cashiers.

In 1993, 55 firms sold 197 fresh-cut salad items (lettuce-based salad blends and salad kits) in mainstream U.S. supermarkets. Sales totaled \$197 million, according to scanner data from Information Resources, Inc. By 1999, 54 firms were selling 459 items, and sales had skyrocketed to \$1.3 billion. However, largely because of barriers to entry in the bagged salad market (e.g., high capital requirements and brand recognition), only a few firms have vied for a major share of the national retail market. Competition for regional and national market shares has been intense. From 1993 to 1999, the top two firms increased their joint market share from about two-thirds to three-quarters of national sales. The remaining top

Production Sites for Iceberg Lettuce Shift with the Seasons

Adapted from Wilson, Thompson, and Cook in *Choices*, First Quarter 1997.

Economic Research Service, USDA

Commodity Spotlight

national and regional firms saw their collective market share drop from 27 percent of national sales in 1993 to 14 percent in 1999. Some of these firms have apparently shifted from producing branded products to private-label products (retailers' house brands), which accounted for 5 percent of national sales in 1993 but had jumped to 10 percent by 1999. The number of competitors outside the top 10 peaked at 53 in 1994 and declined to 43 in 1999, while their combined market share shrank to less than 1 percent of total dollar sales.

Processors and shippers of fresh-cut salads have a more complex relationship with retailers than firms that sell only commodities, primarily because salads resemble packaged goods more than they do conventional produce—a uniform quality product that is available year round. The amount of fresh-cut salad shipped to retailers is more consistent from week to week than that of much fresh produce, although, according to university research, consumer demand for fresh-cut salads does fluctuate seasonally. Producers of fresh-cut products are concerned about capacity utilization, and process raw ingredients continuously despite fluctuations in yields and production throughout the year.

Emerging Trade Practices & Trends in Produce Marketing

The Economic Research Service (ERS) is working with industry experts to undertake descriptive and analytical research studies on the changing nature of produce markets and market channels and their implications for competition. The major objective of a recently completed study was to identify and characterize types of marketing and trade practices used in the produce industry, focusing on the relationship between shippers and retailers.

Because there are no public data on transactions between produce shippers and their customers, ERS and university researchers conducted a small number of personal interviews with fresh fruit and vegetable shippers to better understand these practices and the changing nature of shippers-buyer relations. The study focused on California grapes, oranges, and tomatoes; California and Arizona lettuce and bagged salads; and Florida tomatoes and grapefruit. The interviews concentrated on two main aspects of the business relationship between shippers and retailers: the types and characteristics of sales and marketing arrangements, and the types of fees and services that shippers are being asked to provide, or are offering, to retailers and mass merchandisers.

For more information on the produce marketing study, see AO March 2001. More details on the findings for lettuce and bagged salads will be available in the forthcoming publication, Recent Changes in Marketing and Trade Practices in the U.S. Lettuce and Fresh-Cut Vegetable Industries, on the ERS website—www.ers.usda.gov.

Although short supplies of produce resulting from bad weather would ordinarily translate into higher prices for retail buyers, fresh-cut salad shippers tend to absorb those increases and keep prices stable. By doing this, they ensure that weather conditions usually do not affect

retail prices. In all of these ways, the fresh-processing business is more a manufacturing than an agricultural enterprise—a key indication of how much the U.S. lettuce industry has changed in recent years.

Product Mix & Marketing Channels Are Diverse

In conjunction with a team of university researchers, USDA's Economic Research Service interviewed 15 lettuce shippers in California and Arizona as part of a larger study on changes in produce marketing. Eight of the 15 shippers sold lettuce as a commodity, as well as (on average) 24 other kinds of fresh vegetables. The shippers sold mostly iceberg lettuce, followed by romaine and green and red leaf lettuce. Five of the eight firms sold lettuce only as a commodity, and three offered a few fresh-cut and value-added items such as broccoli and cauliflower florets. Seven of the 15 shippers interviewed either concentrated exclusively on bagged salads or offered an extensive line of bagged salads and other value-added products in addition to their commodity sales. The combinations of fresh-cut, value-added, and commodity items varied significantly from firm to firm.

Retail Sales of Fresh-Cut Salad in Mainstream Supermarkets Are Highly Concentrated in a Small Number of Firms



Source: Information Resources, Inc.
Economic Research Service, USDA

Commodity Spotlight

WINDOW on the PAST

Excerpts from USDA publications

U.S. Consumers Demanding Crisp-Textured Lettuce

Lettuce is the most important salad plant and one of the most important of the vegetable crops. The present commercial crop has an annual value of about \$28,000,000. Lettuce is in demand at all seasons of the year. . . .

The Western States grow largely the crisp-head type of lettuce, which sells on the eastern markets as "Western Iceberg." . . . Until recently the eastern lettuce crop consisted almost entirely of the butter-head varieties Big Boston and White Boston, . . . [but they] are being rapidly replaced by strains of crisp-head New York and the Imperials.

This shift from butter-head varieties . . . has resulted from consumer demand. The consuming public has come to prefer the crisp-textured lettuce, and jobbers and dealers find that it stands handling and shipment better than the more delicate butter-head varieties.

Cos or romaine lettuce has never been popular in America. . . . There is a limited market for this type of lettuce among the foreign population of the larger cities.

Yearbook of Agriculture, 1937

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Most shippers use a variety of outlets for selling their lettuce. Ten of the firms interviewed provided information on where they marketed their lettuce in 1999. Grocery retailers were the most frequent marketing outlet, followed by food service, produce wholesalers, mass merchandisers, brokers, and exporters. In contrast, firms selling bagged salads and value-added products sold almost exclusively to retailers and foodservice firms.

Sales and marketing arrangements will continue to change as markets for lettuce and fresh-cut produce evolve. For example, the relationships between shippers and their customers are becoming more formalized. Buyers are developing preferred supplier arrangements with shippers, written contracts are more common, mass merchandisers are making shippers responsible for tracking sales and replenishing inventory, and shippers are providing category management to retailers (AO March 2001).

Lettuce shippers have adopted various business strategies to manage buyer demands for greater volumes, broader product lines, and year-round availability. Some firms have changed their internal focus to concentrate on certain market channels or commodities. Some have made external arrangements with other vegetable shippers—such as co-packing arrangements, alliances, and consolidated marketing offices—to bolster their product lines and sales. In addition, product innovation has brought new fresh-cut items to grocery store shelves. Fresh-cut fruit and potato products are now on the market and may become more widely available as processing plants are built in more locations around the country. **AO**

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April Releases—USDA's Agricultural Statistics Board

The following reports are issued electronically at 3 p.m. (ET) unless otherwise indicated.

April

- 2 Crop Progress (4 p.m.)
- 3 Weather - Crop Summary (12 noon)
- Dairy Products
- Egg Products
- 4 Broiler Hatchery
- 6 Dairy Products Prices (8:30 a.m.)
- Poultry Slaughter
- Vegetables
- 9 Crop Progress (4 p.m.)
- 10 Crop Production (8:30 a.m.)
- Weather - Crop Summary
- 11 Broiler Hatchery
- 12 Dairy Products Prices
- Milkfat Prices
- Potato Stocks
- Turkey Hatchery
- 16 Crop Progress
- 17 Milk Production
- Weather - Crop Summary
- 18 Broiler Hatchery
- Fruit and Vegetable Ag. Practices
- 19 Hatchery Production - Ann.
- 20 Dairy Products Prices (8:30 a.m.)
- Cattfish Processing
- Cattle on Feed
- Cold Storage
- livestock Slaughter
- 23 Chickens and Eggs
- Crop Progress (4 p.m.)
- Monthly Agnews
- Weather - Crop Summary
- 25 Broiler Hatchery
- Dairy Products - Ann.
- Floriculture Crops
- Milk - PDI
- Poultry - Production and Value
- 27 Dairy Products Prices (8:30 a.m.)
- Milkfat Prices (8:30 a.m.)
- Meat Animals - PDI
- Monthly Hogs and Pigs
- Peanuts Stocks and Processing
- 30 Agricultural Prices
- Crop Progress (4 p.m.)

World Agriculture & Trade



Embassy of Japan

Japan's Changing Agricultural Policies

The high cost of farming and increased openness to world trade have put Japan's agricultural producers under constant competitive pressure. As a result, the number of farms in Japan dropped by 14 percent from 1990 to 1998, and Japan is increasingly dependent on food imports to meet consumers' nutritional needs. Japan is the world's largest importer of agricultural products (\$33 billion in 1999). The government is revising its agricultural policies and programs in an attempt to stem the decline in self-sufficiency in food production. Japan also seeks to ensure that its farm program expenditures will be exempt from reductions required under current and proposed rules of the World Trade Organization (WTO). In its February 2001 notification to the WTO, Japan contended that major programs subject to reduction have been replaced by new programs that are less trade-distorting and thus exempt from cutbacks.

New National Food Policy

In July 1999, Japan adopted the Basic Law on Food, Agriculture and Rural Policy, which "thoroughly, reviews the postwar agricultural policies...and sets up a new policy-making scheme under...four

basic principles," which include securing a stable food supply, fulfillment of the multiple functions of agriculture, sustainable development of agriculture, and promotion of rural areas. These principles reflect two themes stressed by Japan's government: 1) national food security requires that domestic agriculture produce some minimal level of output, and 2) agriculture is multifunctional, not only producing food and fiber, but also serving, for example, an environmental purpose.

Major initiatives are underway to change the structure of farming and to make it more efficient. Under its current structure, Japan's agriculture has such high producer costs that without protection it could not compete with most imported products. Without barriers to trade, Japan's consumers could rely almost completely on imports to satisfy their food needs—and save money.

Japan is raising economic and political arguments that even with its current uncompetitive structure, agriculture's functions beyond producing food for the market make it worth preserving. For instance, Japan cites the value of rice paddies in controlling flooding and the need to maintain agriculture in order to preserve the economic health of rural villages.

Japan's new policy stance explicitly recognizes that food security depends on continued imports and stocks, as well as on maintaining domestic production capability. During the current WTO discussions to continue the agricultural reform process, Japan is arguing that greater dependence on imported food (currently supplying 60 percent of caloric intake) could be dangerous if extreme events, such as war, cut trade links.

The goal of the Basic Law is preserving Japan's current level of domestic food production and not allowing the rate of food self-sufficiency (the share of consumption produced domestically) to decline further. Given this objective, the Basic Law encourages greater use of market mechanisms to increase the efficiency of the farm sector. In the last 3 years, a series of commodity-specific laws has changed the way the government supports agriculture. In general, the new policies set up programs to provide income support and income insurance for production of specific commodities instead of intervening to support market prices.

The Rice Farming Income Stabilization Program, which began in 1998, is a major example of the new commodity policies. Rice farmers receive some compensation if market prices fall below a "standard" price, calculated as the average market price of the preceding 3-year period. In the event of below-average prices, producers can collect 80 percent of the difference between the current-year price and the standard price, multiplied by the farmer's current-year production. Payment comes from the Rice Farming Income Stabilization Fund, supported by contributions from participating farmers (2 percent of the standard rice price per unit of the farmer's output) and the government (6 percent of the standard rice price per unit of total domestic production) each year. Participation in the Income Stabilization Program is voluntary.

Because rice surpluses are a chronic problem, production-limiting rice diversion programs have a long history in Japan. Farmers choosing to participate in the Rice Farming Income Stabilization Program are required to participate in the Rice Supply-Demand Stabilization Program, which diverts some of their land

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away from rice. Japan asserts that the program linkage between government assistance and limitations on rice production puts rice policy into the WTO “blue-box” category—i.e., the programs are exempt from domestic support limits because they involve limits on production. Some rice farmers with efficient operations have chosen not to participate in the rice programs because they do not wish to divert any land from rice production or to contribute to the rice fund.

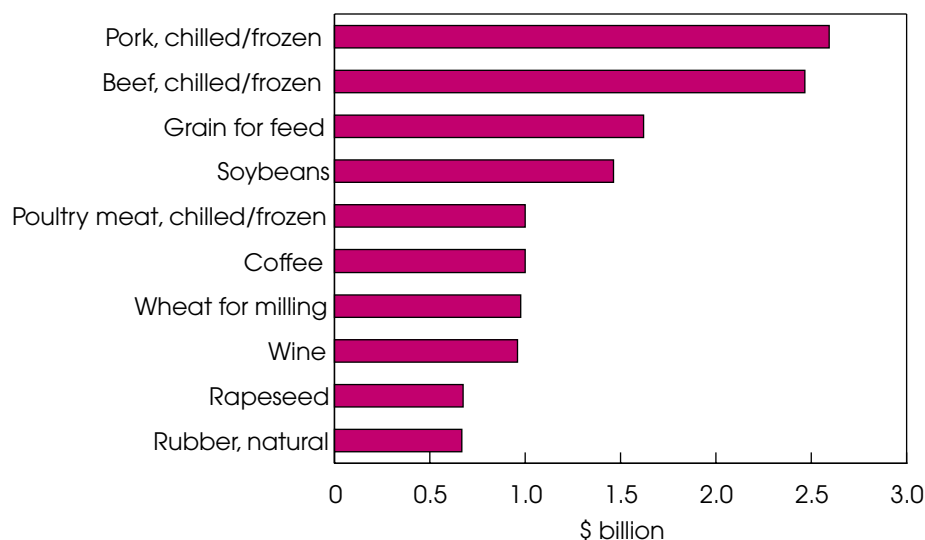
Diversion can be to crops, fruit trees, vegetables, or fodder, or to conservation (fallow status) or other uses (e.g., landscape enhancement). Government payments per hectare (revised annually) vary according to the use made of diverted land and reflect government preferences for growing alternative commodities.

A farmer could divert a rice field to another crop, receive revenue from selling that crop plus the diversion payment, and still participate in the income stabilization program to receive payments from rice farming on other fields. Surpluses are also a problem for milk, fruits, and vegetables at times, and programs for those commodities include setting maximums for production and rewarding farmers who limit production.

For other commodities, the concern is declining production, not overproduction. For example, the new soybean program that was introduced in 2000 works like the rice income program described above, but has no requirement to limit or divert soybean area. Instead, diversion from rice to soybeans is encouraged. Farmers participating in the Soybean Farming Stabilization Program receive compensation for 80 percent of a price drop when prices fall below the standard price. Annual payments into the Fund are 3 percent of the standard price from farmers and 9 percent of the standard price from the government. And farmers growing soybeans on a diverted rice field also get a direct payment from the diversion program for not planting rice. The same type of income program is to be introduced for wheat.

The new income stabilization programs for rice and soybeans are typical of most policies for agricultural commodities in

Pork and Beef Are Japan's Leading Agricultural Imports



Annual average value of top 10 agricultural imports, 1997-99.
Economic Research Service, USDA

Japan. The programs rely more on competitive market pricing than did Japan's old policies. For example, the old soybean deficiency payment was based on a fixed target price based partly on estimates of average costs of production. The program paid 100 percent of the difference between the target price and the actual market price received, so farmers had no strong incentive to raise quality or to produce for a niche market.

Under the new system, farmers participating in the income stabilization program get only 80 percent of the calculated price differential and thus bear a 20-percent share of the risk of revenue loss from a drop in prices. Because the standard price is an average of previous actual market prices rather than a support price based on costs, farmers today have a greater incentive to keep costs low and to achieve high sales prices—e.g., through their choice of product mix or through development of a marketing strategy.

For other agricultural products, administered prices set by the government were intended to guide market prices, and the government sometimes stepped in to buy up output when market prices fell below a designated level, raising prices to buyers as well as to sellers. In theory, Japan's

commodity markets are supposed to see less of this intervention in the future.

Changes in Japan's Import Policies

Japan has an extensive set of trade policies to regulate imports of agricultural commodities. When the Uruguay Round Agreement on Agriculture (URAA) was ratified, Japan agreed to replace quantitative restrictions with tariffs and tariff-rate quotas (except for rice), and to reduce the level of protection afforded by the tariffs and quotas during 1995-2000. Since the URAA went into effect, Japan has made further changes in its trade rules, including:

- a reduced role for the Food Agency, the state-trading arm of the Ministry of Agriculture, Forestry, and Fisheries;
- establishment of a tariff-rate quota for rice;
- extensive use of URAA safeguard mechanisms to raise tariffs; and
- reduction of phytosanitary barriers against some horticultural imports.

Domestic wheat production is now sold in private-sector transactions instead of being sold to the Food Agency. Imports of

World Agriculture & Trade

Policies Affecting Imports and Production of Major Agricultural Commodities in Japan

	Trade policy					
	Total imports	Tariff-rate quota ¹	Tariff or within-quota tariff	Over-quota tariff ²	Maximum price markup	Average import price
	1,000 tons	1,000 tons	Percent	Yen/kg	Yen/kg	Yen/kg
Rice ³	693	682	0	341	292	43
Wheat ^{3,4}	5,900	5,740	0	55	53	19
Barley ⁵	1,600	1,369	0	39	34	16
Corn ⁵	16,000	Customs supervision	Higher of 50% or 12 yen/kg			13
Sorghum	2,100	None	3			12
Soybeans	4,750	None	0			27
Rapeseed	2,100	None	0			25
Beef	1,000	None	38.5			388
Pork	880	None	4.3% + duty ⁶			530
Poultry meat	550	None	8.5-11.9			170
Milk	0	Quota ⁷	25	114 + 21.3% tariff		600
Sugar ⁸	1,573	Gov't purchase	0			21
Peanuts	100	75	10	617		108

	Domestic policy					
	Total production	Producer quota	Diverted area	Income stabilization program	Paid diversion from rice	Self-sufficiency ⁹
	1,000 tons	1,000 tons	1,000 ha			Percent
Rice	8,636		1,063	Yes		93
Wheat	600			Yes	Yes	9
Barley	160			Yes	Yes	9
Corn	1			No	No	0
Sorghum	0			No	No	0
Soybeans	190			Yes	Yes	4
Rapeseed	1			Yes	No	0
Beef	534			Yes		35
Pork	1,270			Yes		59
Poultry meat	1,160					68
All milk	8,500			Yes		100
Manufacturing		2,270				
Sugar	795			Yes	No	34
Peanuts	27				No	21

2000 data. Yen/US\$ = \$107.42.

1. Within the tariff-rate quota, the simultaneous buy-sell (SBS) quota is 120,000 tons for rice, 120,000 for wheat, and 600,000 for barley. 2. The government in general has waived the over-quota tariff. 3. Rice, wheat, and barley imports under quota are subject to decisions of the state trading organization. 4. Actual wheat markup is 25 yen/kg (the cif import price minus the resale price for nonfeed-use wheat). 5. In practice, corn is imported with no tariff. Customs supervision limits the amount available for the sweetener industry. 6. If the pork import unit price is below a government-set standard import price (482 yen/kg for pork cuts), duty is charged to make up the difference. 7. Fluid milk is included in a general quota for several dairy products. 8. Sugar imports must be sold to a government agency, which resells to private firms at a higher price. 9. Production divided by the sum of production and imports.

Japan's Pork-Sector Policies

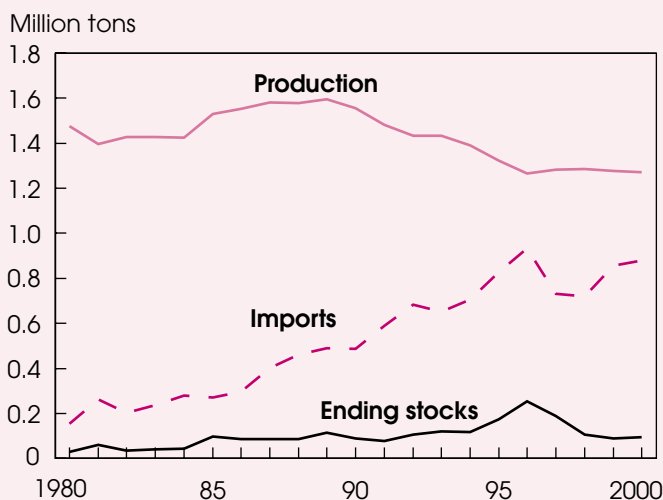
Japan's pork market illustrates the role of both import and domestic measures in protecting commodity markets, and also the very rapid restructuring of agriculture that is occurring as market prices decline. Japan's pork imports—the world's largest—grew steadily until 1997, replacing domestic production. Since then, production declines in Japan have been insignificant and imports have been erratic.

Probably the key factor in shifting import levels is that Taiwan, once the largest source of Japan's pork imports, has been absent from the trade arena since the sudden appearance of foot-and-mouth disease there in 1997 (AO October 2000). Imports from Korea ceased in 2000 for the same reason. However, Japan's use of the gate price system, safeguards under the Uruguay Round Agreement on Agriculture (URAA), and programs supporting pork producer revenues have strengthened domestic production at the expense of imports.

Japan's *gate price system* strongly resembles the variable levy on pork that it replaced in 1995. The gate price system is triggered when the actual price of imported pork is below the government-set standard import price. If the unit price of the imported pork (based on the price of a shipping container of meat) is less than the standard import price, the duty charged is equivalent to the differential between them plus the usual 4.3 percent ad valorem tariff. This raises the price of cheaper pork cuts in Japan. To avoid the duty, importers mix cuts of different values in containers until the container's average value is at or above the standard import price. The gate price system distorts trade because traders import cuts that they ordinarily would not buy.

In addition to the *Special Safeguards* of the main URAA text, Japan negotiated an additional set of safeguards for pork and beef in a side agreement. The pork safeguard is triggered when cumulative quarterly imports rise 19 percent or more over the average import volume during the same period in the previous 3 years. If Japan chooses to invoke the safeguards, it can raise the gate price to any level not exceeding an upper bound specified in its URAA commitment for the remainder of the year (or the first quarter of the following year if the trigger occurs during the fourth quarter), instead of applying the lower gate prices negotiated in the URAA.

Japan's Pork Production Stabilized in the Late 1990s, While Imports Have Been Erratic



Economic Research Service, USDA

Japan invoked both kinds of safeguards at times in 1996 and early 1997. In response, importers stockpiled frozen pork inside and outside Japan, taking it through customs in a quarter when the safeguard did not apply. The surge of frozen stocks avoiding higher duty in place under the safeguard, however, increased the likelihood that import volumes would trigger the safeguard again in the following quarters, launching a cycle that was ended by the sudden withdrawal of Taiwan from the market.

Support for Japan's 11,700 hog farms—down from 36,000 in 1991—is through the Regional Pork Price Stabilization Fund, begun in 1995, which pays farmers the difference between the market price and a floor price that is specific to each prefecture. The market price was below floor prices (\$3.50-\$4.00/kg) in 2000 for about 3 million hogs sold in the first half of 2000, and the fund paid out about \$85 million during the period. Check-off fees from farmers go into the fund, but most support comes from the government.

some rice and of wheat and barley for feed use have been increasingly conducted through a "simultaneous buy and sell" (SBS) process, which allows foreign exporters and domestic buyers to work together to submit bids. The Food Agency chooses bids that provide the highest margin between the import price paid to sellers and the higher (marked up) domestic resale prices charged in Japan, with the Food Agency keeping the markup.

However, the margin cannot exceed the maximum markup levels that Japan agreed to in the URAA.

The list of designated grain suppliers to the Food Agency in its traditional (non-SBS) purchases of rice, wheat, and barley within the quotas has broadened in the 1990s to include foreign-controlled firms. These changes reduce the Food Agency's

role in determining what is brought into Japan, and where it comes from.

Japan's rice trade was treated as a special case in the URAA, and Japan did not convert nontariff barriers into an equivalent tariff for rice. Instead, it agreed to implement a quota which was to reach about 8 percent of domestic consumption in 2000 compared with zero in most years before 1995. However, Japan changed its policies

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and decided to “tariffy” its rice trade beginning in 1999 (AO April 1999). It established a rice *tariff-rate quota* and an overquota tariff based on the tariff equivalent of its former nontariff barriers. The overquota tariff is so high that it effectively prohibits additional rice imports, and the change, while ending the special treatment of Japan’s rice trade, did not open the door to new trade.

Japan has used the *Special Safeguard* mechanisms established in the URAA extensively since 1995. They allow a temporary increase in duties to one-third higher than the normal tariff if a surge in import volume or a steep decline in import prices occurs, and if the right to use safeguards had been reserved for a product in the URAA. Japan used such safeguards 28 times in the 5 years prior to April 2000, chiefly for starches, livestock products, and dried legumes.

In addition, Japan negotiated a side agreement to the URAA to establish another kind of safeguard mechanism for its pork and beef markets. At the end of 2000, Japan began proceedings to use measures under the UR Agreement on Safeguards to protect domestic dried shiitake mushroom and welsh onion production. Such safeguard measures could involve imposing a quota on imports for up to 4 years. Japan has announced that other commodities are under consideration for such protection.

Japan’s *phytosanitary barriers* have blocked imports of some vegetables and fruits. After prolonged negotiations, Japan agreed in 1999-2000 to use one set of criteria for all varieties of apples, tomatoes, and nectarines from a given growing region. If phytosanitary acceptance were obtained for a growing regime for one variety in an exporting country or region of a country, it could thus be extended to other varieties from that area, saving time and expense for farmers growing products for export. Despite this advance, Japan’s phytosanitary regulations on imported fruit and vegetables remain very stringent and costly to satisfy.

Agriculture in Japan

Overall, agriculture is big business in Japan. In 1998, the latest year of available data, the gross value of agricultural output was \$76 billion. However, much of Japan’s agriculture is carried on by relatively small farms with high labor costs. Over 2.5 million households met one of two criteria for commercial farming: selling over \$4,000 of farm output in a year or farming over three-fourths of an acre. In 1998, 11.3 million people—almost 9 percent of Japan’s population—resided in households engaged in commercial farming. The large number of farm households reflects the very small scale of landownership in Japan that results in a large number of people with a stake in farming.

Japan’s government devotes large sums to supporting agriculture. In 1998, Japan spent over \$82 billion (about 6 percent of national government expenditures) on agriculture, in such projects as improving irrigation, reshaping fields, building processing plants, and providing production subsidies. On average, Japan’s consumers spend considerably more on food than U.S. consumers and the food share of living expenditures is larger—18 percent in Japan in 1994 vs. 8-10 percent in the U.S. The Organization for Economic Cooperation and Development (OECD) estimates that in 1999, consumers spent an extra \$68 billion (about 1.5 percent of GDP) as a result of just some of Japan’s agricultural policies.

Implications of The New Policies

Japan is the world’s largest importer (by value) of pork, beef, corn, and a number of other commodities. Imports of eight commodities—pork, beef, corn, soybeans, poultry meat, coffee, wheat, and wine—each averaged near \$1 billion or more per year during 1997-99. Japan is also the largest export destination for U.S. agricultural products—a \$9-billion market in 2000.

The condition of Japan’s domestic agricultural production is of interest to many suppliers in global commodity markets. Consumption of basic commodities in Japan is relatively stable and not likely to grow in the future because of a population growth rate near zero and the lower food needs of an aging population. In general, increases in imports of basic commodities into Japan will occur only if Japan’s production decreases. The current structure of production survives in the shelter of government policies.

Japan’s policies are aimed at making farms more efficient in order to preserve the existing level of agricultural production. Together with heavy support for farm consolidation, mechanization, and efficient packing, distribution, processing, and marketing, the new commodity programs encourage a smaller number of

professional farmers to compete against imports in satisfying Japanese consumers. To the extent that this new set of programs succeeds, imports will not grow.

The new programs face severe hurdles. Market prices have been declining in Japan for most years in the last decade. Participating farmers will be compensated for 80 percent of a drop from previous years’ average prices for many commodities. Competition from imports and from more efficient Japanese farmers not participating in the stabilization schemes will be intense. Unless farmers receive additional forms of support, so much land may exit farming that output will fall. Japan has already begun direct per-hectare payments to farmers in mountainous areas where consolidation is difficult, basing payments on multifunctionality arguments. Spending on the program in 2000, the first year, was over \$300 million.

Although Japan’s federal and local governments spend more in support of agriculture than the gross value of agricultural output, Japan’s spending to maintain production is constrained by WTO rules. In formulating its new policies, Japan seeks to move its policies out of the “amber box” of policies that are subject to reduction because they distort trade, and to develop policies that fit in the “blue” or “green” boxes. Unlike blue box policies,

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green box policies are not tied to current production or price of a commodity.

Japan's URAA commitment to cut amber-box spending involved scaling back programs that set administered prices for domestic output. These prices were usually high enough to cover most farmers' costs, and the government managed some markets to make consumers bear the costs. Now, administered prices have been eliminated, but two related questions are still not answered:

- How will the WTO classify the new policies under existing rules—i.e., amber, blue, or green box?
- How will the new policies fit within a set of international rules that might emerge in ongoing WTO negotiations over a new agreement on agricultural trade?

Japan's proposal for the WTO negotiations includes calls to allow policies to maintain domestic food production for

food security and for functions other than efficient food production. Japan favors retention of the WTO blue box category and expansion of the green box category to accommodate such policies. Japan did not have policies that fit in the blue box at the time the URAA was ratified, but in its February 2001 notification to the WTO, Japan contended that its new rice programs belong in the blue box (beginning with the 1998 crop) and thus expenditures are exempt from reduction. However, many other countries are calling for elimination of the blue box category in the future. Within and outside Japan, the actual operation of the new policies, their impacts on production and trade, and their interaction with Japan's negotiating position will be watched with interest. **AO**

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Based in part on reports from the USDA Foreign Agricultural Service office in Tokyo, Japan.

Upcoming Reports—USDA's Economic Research Service

The following reports are issued electronically at 3 p.m. (ET) unless otherwise indicated.

April

- 5 Tobacco
- 10 World Agricultural Supply & Demand (8:30 a.m.)
- 11 Cotton and Wool Outlook (4 p.m.)**
- Oil Crops Outlook (4 p.m.)**
- Rice Outlook (4 p.m.)**
- 12 Wheat Outlook (9 a.m.)**
- 18 Agricultural Outlook*
- 19 Vegetables and Specialties
- 24 U.S. Agricultural Trade Update
- 25 Feed Yearbook
- Livestock, Dairy, and Poultry (4 p.m.)**

*Release of summary, 3 p.m.

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Policy



Jack Harrison

Recommendations of the Commission on 21st Century Production Agriculture

Debate on the future direction of U.S. farm policy is underway. This is the first in a series of articles on current farm policy topics. It describes the recommendations of a commission established under the 1996 Farm Act. In upcoming issues, AO will address other policy proposals and will examine how current farm policy is affecting the agricultural sector.

The Commission on 21st Century Production Agriculture, whose final report was released on January 31, 2001, was charged in the 1996 Farm Act with developing recommendations for legislation to “achieve the appropriate future relationship of the Federal government with production agriculture.” In its report, *Directions for Future Farm Policy: The Role of Government in Support of Production Agriculture*, the Commission outlined four goals for U.S. agricultural policy, based on testimony gathered at a series of listening sessions:

- production of an abundant supply of high-quality agricultural products at reasonable prices;

- maintenance of a prosperous and productive economic climate for the farmer producers;
- maintenance of the family farm organization as a dominant part of the production system;
- realization of a high quality of life for all individuals living in rural areas.

The Commission concluded that the government should pursue policies and programs promoting nine key outcomes:

- ensure a competitive agricultural economy through monitoring of concentration, enforcement of antitrust laws and related regulatory authority, ensuring transparency of market behavior, including contracting;
- develop policies and programs that enhance the competitiveness of U.S. agricultural products, reduce trade barriers, open markets, and enhance the ability of producers to maximize value-added opportunities;
- base all policy on sound science and insist that foreign competitors do likewise;

- promote and enhance food safety and a clean environment;
- promote and enhance animal and plant health and safety;
- provide support for agricultural research and education;
- enhance the development and use of risk management tools;
- develop and fund programs that meet the special needs of small and limited-resource farmers;
- provide an effective and adequate income safety net for farmers, with minimal market distortion.

In pursuit of these key concepts, the Commission recommended specific legislative approaches in the areas of assuring an income safety net for producers, enhancing risk management options, supporting conservation and environmentally beneficial practices, improving agricultural trade opportunities, revising individual commodity policies, and assisting small and limited-resource farms.

Assuring an Income Safety Net For Producers

The Commission’s proposals for an income safety net endorsed the idea of countercyclical payments to producers at times of low prices, in place of ad hoc emergency spending. At the same time, the Commission recommended the continuation of planting flexibility as introduced by the 1996 Farm Act. The recommendations specified a two-part system of payments: 1) continuation of the current Agricultural Market Transition Act (AMTA) payments at baseline allocations of about \$4 billion per year, and 2) development of a Supplemental Income Support (SIS) program.

Although the Commission left the details of the SIS program to congressional debate, it made several suggestions for program design. Payments should be triggered when, due to either production or price disasters, farmers’ national or regional aggregate gross income from program crops (wheat, corn, soybeans, sorghum, rice, upland cotton, oats, and barley) fails to meet a set percentage of an historical average based on a fixed-base reference period. As with current AMTA

payments, eligibility would be based on historical production levels of program crops during the reference period. Because the program would be “decoupled” from current prices and yields for specific commodities, the Commission believes it could be defined as a “green box” payment (i.e., minimal effects on trade) under current World Trade Organization (WTO) commitments, exempting it from WTO disciplines limiting domestic support.

The Commission acknowledged potential difficulties with such a plan and a number of possible alternative approaches that Congress might consider in determining income averages, payment triggers, eligibility, and payment levels. For example, using a national-level aggregate income could lead to cases in which the national trigger level for SIS payments is not reached, even though particular localities or crops produce average incomes below the trigger. Use of an aggregate income measure for a region or crop area could address this problem. Another difficulty may be choosing the appropriate reference period on which to base the trigger; the implications of various fixed-base periods require analysis, and a moving average may also need to be considered. Other difficulties include determining the appropriate percentage of average income to be compensated, whether the aggregate measure of income should be based on gross crop income or net cash income, and whether the mix of program crops should be extended to include other commodities.

In addition to maintaining the base AMTA payments and developing a SIS program, the Commission recommended continuing the marketing assistance loan program, with both loan deficiency payments and marketing loan gains. While suggesting that any increases in loan rates could lead to market distortions, the Commission did recommend ending limits on payments and rebalancing the loan rates to better reflect historical market prices.

Enhancing Risk Management Options

The Commission noted that a wide array of risk management tools were available to U.S. producers, including planting flexibility, diversification, production and

marketing contracts, hedging and futures options contracts, labor outsourcing and input leasing, vertical integration, altering production and cultural practices, and off-farm income. The recommendations, however, focused on only two categories of risk management: insurance policies and savings account programs.

In the area of crop and revenue insurance, the Commission called for a study of the possibility of making these programs actuarially sound and based on products provided by private companies, with the Federal government no longer underwriting insurance company risk, but rather providing vouchers for producers that offset their premium costs. In making this recommendation, the Commission expressed concerns about the effect of current crop insurance programs on farmland rental rates, the level of loss acceptance by insurers in areas with high loss ratios, the inducement by crop insurance to continue production on marginal lands, the effect of crop insurance provisions on planting decisions, and the fiscal accountability of the insurance industry.

The recommendations specified a two-part system of payments to producers: continuation of the current Agricultural Market Transition payments and a Supplemental Income Support program.

Among alternative savings account proposals currently under discussion, the Commission favored the Farm and Ranch Risk Management (FARRM) account. Producers who owe Federal tax on a positive net farm income would be permitted to deposit 20 percent of that net farm income into an interest-bearing savings account. Interest on the account would be taxed annually, but the principal would be taxed only on withdrawal. Although previous FARRM account proposals have limited to 5 years the time deposits may remain in the account, the Commission recommended no time limit be included so that the accounts could function both as cash reserves and as retirement savings.

Supporting Conservation & Conservation Practices

The Commission focused its attention on two conservation programs—the Conservation Reserve Program (CRP) and several conservation cost-share programs. Citing significant reductions in average erosion rates since 1986 under the CRP, the Commission recommended its continuation. To enhance benefits to water quality, it further recommended dedicating any increases in program acreage to partial field enrollments along riparian areas, such as buffer strips, filter strips, wetlands, and grass waterways.

Among conservation cost-share programs, the Commission recommended particularly the continuation of the Environmental Quality Incentives Program (EQIP), which provides incentive payments and cost sharing under a 5- to 10-year contract for conservation practices outlined in a site-specific plan. Producers may enroll cropland, rangeland, pasture, and forestland, but 50 percent of the program is dedicated to conservation practices on livestock operations. Payments are limited to \$10,000 per person per year and \$50,000 over the length of the contract. To enhance the value of EQIP, the Commission recommended it be funded at the \$200 million annually authorized in the 1996 Farm Act, with additional funds dedicated to administration of the program by USDA's Natural Resources Conservation Service (NRCS). Program levels have been limited to \$174 million in fiscal years 1999, 2000, and 2001.

The Commission further recommended that research be conducted on ways to provide incentive payments to farmers for the positive contributions of agricultural practices to air and water quality—practices which might include alternative fuels, manure management, and carbon sequestration.

Improving Agricultural Trade Opportunities

Addressing trade, the Commission endorsed the U.S. position presented to the WTO in June 2000, particularly the commitment to a comprehensive negotiation of all economic sectors, including comprehensive negotiation of issues with-

Policy

in the agricultural sector. The agricultural sector issues include tariffs and tariff-rate quotas; import and export state trading enterprises; new technologies; export subsidies, taxes, and credit programs; domestic support to agriculture; and treatment of developing countries. The Commission further recommended granting trade negotiating authority to the President, noting that, except for the recent lapse in the 1990s, such an authority has been in place since 1934.

The Commission recognized the impact of government policy on the success of small family farms, recommending that programs be designed specifically for small and limited-resource farms.

Finally, the Commission expressed its belief that negotiations over environmental and labor standards are better handled through the United Nations Environment Program and the International Labor Organization than through the WTO.

Revising Individual Commodity Policies

The Commission considered four commodities—*dairy*, *peanuts*, *sugar*, and *tobacco*—unique enough to warrant review and recommendations regarding their individual programs.

Dairy policy, according to the Commission, must address the issues of Federal marketing orders, dairy compacts, Federal price support, and international market opportunities and challenges. Milk marketing orders require simplification and greater transparency, even after implementation of reforms required by the 1996 Farm Act. Regional dairy compacts have attracted increasing interest as a means of raising minimum price levels. The Federal price support program has been extended annually, despite its scheduled elimination in 1999. And dairy import controls and export enhancements continue to face scrutiny in trade negotiations.

The Commission recommended examination of several dairy policy options that might help curb expansion of milk production and reduce dependence on regional support strategies in the face of new technologies facilitating national and international milk marketing. Among these options are 1) alternative price support mechanisms, including the possibility of a marketing loan program for dairy products; 2) some form of direct payment for dairy producers; 3) supply controls; 4) forward contracting options; 5) extension of dairy compacts beyond the current regional models; and 6) revenue and gross margin insurance options.

In the view of the Commission, *peanut* producers face pressures from expanding trade commitments and from falling domestic demand. Current peanut policy keeps the U.S. domestic peanut price higher than the world price through a system of marketing quotas and price supports. Critics have voiced concern about production and consumption inefficiencies created by this policy. The Commission recommended examination of several policy options that might continue support for the domestic peanut industry while stimulating stronger demand and competition: 1) phased reduction of the peanut quota system, including compensating current quota holders and allowing sale or lease of quotas across state lines; 2) subsidies to manufacturers for purchase of domestic peanuts, similar to the Cotton Step 2 program; 3) a peanut marketing loan; 4) a direct payment program for peanut quota holders; and 5) incentives to increase competition in the industry.

The Commission recommended reconsideration of *sugar* policy in view of rising stocks and slowing demand growth. The program supports producers through a system of nonrecourse loans that act as a guarantee of minimum price levels for beet and cane sugar. Sugar is imported at a minimum annual level through a low-duty tariff-rate quota allocated among importing countries, with additional

access granted to Mexican sugar through the North American Free Trade Agreement (NAFTA). Increasing domestic production, the result of acreage expansion and yield improvements, and increasing access for imports, the result of recent trade commitments, has led to downward pressure on prices and forfeitures under the nonrecourse loan program.

To avoid the likelihood of continued stress from increasing supplies on producers and the sugar program, the Commission suggested evaluating a series of alternative policies, individually or in combination: 1) a sugar marketing loan program; 2) domestic marketing and/or production controls; and 3) a direct payment program for producers. The Commission stressed that these alternatives should be considered within the context of international sugar trade commitments.

The Commission called for rethinking *tobacco* policy because of rapidly changing domestic conditions and increasing foreign competition. The current policy is based on a system of marketing quotas that allot a portion of annually determined tobacco demand to growers owning or renting eligible land. The program also provides nonrecourse loans that support prices for tobacco grown under quota at an annually determined loan rate. Increased international competition from higher imports under negotiated tariff-rate quotas and reduced export demand are dampening demand for domestic tobacco leaf. At the same time, domestic cigarette consumption is being affected by the settlement between the tobacco industry and state's attorneys general over health care costs for tobacco-related illnesses. Tobacco-use control programs funded through the settlement are expected to reduce demand, and tobacco producing states are eligible for funding from the cigarette industry to compensate tobacco farmers and quota holders for anticipated losses from reduced demand.

- To review the full report of the **Commission on 21st Century Production Agriculture**
 - To learn more about the Commission
- www.agcommission.org

Given the complicated future of tobacco production and tobacco programs, and the attention being paid to tobacco issues by a number of other entities, the Commission decided only to suggest possible program changes for consideration by other groups charged with examining these issues, rather than making a formal recommendation. The suggestions include 1) increasing transferability of quotas, particularly across county or state borders; 2) a phase-out of the marketing quota program through a buyout; and 3) a marketing loan program for tobacco that could increase export competitiveness by allowing domestic prices to fall.

Assisting Small & Limited-Resource Farms

The Commission acknowledged the value of small family farms as agricultural producers and as significant components of rural communities. It further recognized the impact of government policy on the success of small family farms, recommending programs be designed specifically for small and limited-resource farms. To that end, the Commission recommended that the USDA Small Farms Advisory Committee, successor to the National Commission on Small Farms, receive formal authorization as part of USDA, with permanent staff and funding.

Although deferring to the Small Farms Advisory Committee as the lead group in designing programs for small and limited-resource farmers, the Commission recommended four areas for consideration: 1) assistance for beginning farmers, 2) conservation-based safety net programs, 3) risk management programs, and 4) programs to enhance small-farm competitive-

ness. The Commission suggested that a program of matching grants might allow beginning farmers to become established without taking on burdensome debt. Programs could also be devised to encourage established farmers to assist beginning farmers. Conservation safety net programs could include enhanced technical assistance and timely reimbursement to small and limited-resource farms to establish conservation practices, perhaps with higher cost-share levels for installation of required conservation and environmental practices. Small farms might also be targeted for participation in the conservation and wetland reserve programs or for special programs to preserve green space and viewsheds.

Risk management programs for small farms might include targeting pilot insurance programs to small and limited-resource producers for crops previously not covered and providing specialized educational programs addressing use of sustainable agricultural practices to manage risk. The Commission suggested fully funding already authorized programs intended to enhance small and limited-resource farm competitiveness, such as the Outreach and Technical Assistance Program for Socially Disadvantaged and Minority Farmers (2501) program and farm ownership and operating loan programs. It also suggested increasing appropriations for the Sustainable Agriculture Research and Education (SARE) program and the Rural Technology and Cooperative Development Center Grant program, and providing financial assistance to develop small-producer cooperatives.

As a way of identifying small and limited-resource farms in need of special assistance, the Commission also supported establishment of a voluntary minority small farms registry.

Minority Views Diverge

Not all commissioners shared the majority views presented in the Commission's report. Minority views in the areas of Farm Income Support Policy, Agricultural Trade Policy, and Antitrust and Industry Concentration appear within the main report. These dissents represent essentially two viewpoints that diverged from the majority report in opposite directions. One side cautioned against moving away from a fundamentally market-oriented policy and recommended maintaining programs primarily to provide catastrophic risk protection, to help farmers make the transition to more profitable sizes or enterprises, and to focus on environmental stewardship. The other side called for production-based safety net programs with benefits targeted to family-scale operations, voluntary supply management, expanded land retirement for conservation, trade reforms that consider the needs of domestic agricultural production and consumers, and revitalization of antitrust policies and enforcement.

Further details of these minority views will be presented next month in an article on the diversity of current farm policy proposals, the second in this series on current farm policy topics. **AO**

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Resources & Environment



Maguire/Reeder, Ltd., courtesy American Farmland Trust

Smart Growth: Implications for Agriculture in Urban Fringe Areas

The last two decades have witnessed increased state-level involvement in growth management to counter the negative impacts of land development. Recently, several states have begun shifting from state-imposed requirements for local compliance with state planning goals toward incentive-based, voluntary mechanisms known as “smart growth” strategies. Although still in their infancy, smart growth strategies are becoming increasingly widespread, with implications for agriculture in urban fringe areas.

Local governments have been delegated authority for land use planning and zoning in all 50 states, and historically have relied upon zoning regulations and subdivision requirements that date back to the 1920’s to manage the character and density of new development. During the 1970’s, local and state governments in rapidly urbanizing areas recognized that these traditional techniques for controlling land use were inadequate in influencing the character of growth—namely, in preventing “sprawl” development. Local officials also learned that a popular land use tool, assessing farmland at its use value for property tax purposes, was contributing little to slowing losses of farmland to developed uses. Need for more effective

techniques spurred state interest in adopting new approaches.

What is Smart Growth?

“Smart growth” is a catch-all phrase to describe a number of land use policies to influence the pattern and density of new development. Smart growth principles favor:

- locating new development in center cities and older suburbs rather than in fringe areas;
- supporting mass transit and pedestrian-friendly development;
- encouraging mixed-use development (e.g., housing, retail, industrial); and
- preserving farmland, open space, and environmental resources.

Smart growth directs development to designated areas (cities and older suburbs) through incentives and disincentives, without actually prohibiting development outside them or threatening individual property rights.

States implementing smart growth strategies look at overall growth and attempt to marshal the state’s resources to direct growth. Smart growth strategies generally

receive a broad spectrum of support because they include incentives for voluntary adoption and usually involve a variety of stakeholders in the planning process (e.g., multiple levels of government, nongovernment organizations, and special interest groups).

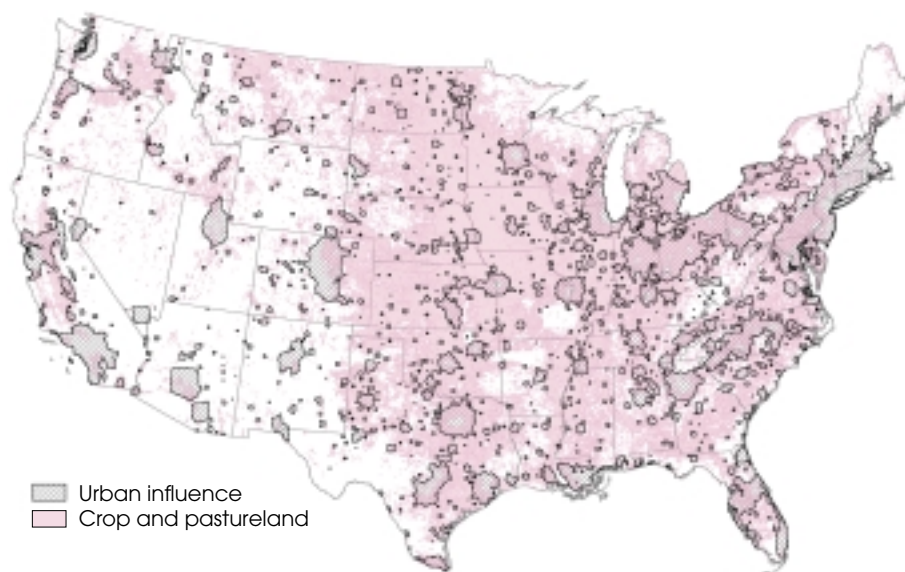
Specific smart growth strategies vary by location but often share common elements. Three strategies in particular could have important implications for local agriculture: concentrating growth in selected areas, coordination of transportation infrastructure to support growth, and permanently preserving farmland.

A centerpiece of smart growth legislation is the designation of urban growth boundaries or growth areas. States will typically remove state-level financial incentives (including Federal incentives controlled by the state) that directly or indirectly encourage development outside growth areas and will instead concentrate these incentives within growth areas. Incentives include state funding for infrastructure, economic development, housing, and other programs. At the same time, states will remove barriers that hinder higher density development within existing urbanized areas. Although states may specify minimum requirements for designating growth areas (e.g., only areas currently or expected to be served by water and sewer systems within a given number of years may qualify), it is local governments that define the actual boundaries, particularly where future developments are planned.

States coordinate transportation investments with development by prioritizing funding for transportation infrastructure within designated urban growth areas. States also favor investments in upgrades to existing transportation routes and in funding for mass transit alternatives to reduce the need for automobile travel rather than investments that contribute to new roads. Also, minimizing the number of ramps for access to highways that connect growth areas helps reduce pressure to develop land adjacent to an expanded road system. Similarly, the Federal government coordinates infrastructure investment with state and local government to minimize adverse development impacts.

Resources & Environment

Crop and Pastureland Is Subject to Urban Influence in Much of the Eastern U.S.



Areas of urban influence are identified using the USDA/ERS index of urban influence based on proximity to a population center and its size.

Source: U.S. Geological Survey LUDA database and 1990 Census of Population.

Economic Research Service, USDA

Establishing programs to preserve farmland and environmental resources complements urban growth areas and is expected to help maintain a viable local farm economy. These programs separate the right to develop land from the right to own and use land. Landowners may voluntarily agree to sell their development rights 1) to the government through a purchase of development rights (PDR) program (permanently retiring the development rights), or 2) to developers through a transfer of development rights (TDR) program (allowing developers to build on other land in certain county-designated areas at higher densities than allowed by the underlying zoning).

When development rights are sold through a PDR or TDR program, landowners retain ownership and use of the land, but are restricted from developing it or using it for nonfarm commercial activity. Even though the land remains private and is not accessible to the public, residents of urbanizing areas are in large part willing to support spending for these programs because farmland provides scenic views, open space, and environmental amenities.

Agriculture in Metropolitan Areas

Farmland owners most likely to experience the effects of smart growth legislation are those in close proximity to existing population centers or planned growth areas. Combining Census of Population data on population density and daily commuting patterns with a measure of urban influence developed by USDA's Economic Research Service (ERS), ERS researchers identified regions subject to the pressures of urbanization. Urban influence increases with proximity of the land to populated areas and with the size of the population. Areas within the regions may be subject to low, medium, or high degrees of urban influence. Of 3,077 U.S. counties, 1,062 have land subject to some degree of urban influence. Many of these counties also contain significant amounts of crop and pastureland.

Farms in metro areas are an increasingly important component of U.S. agriculture in terms of their numbers. A Metropolitan Statistical Area (MSA), as defined by the Office of Management and Budget, includes a core county (or counties) that either 1) contains a city of 50,000 or more

people, or 2) contains an urbanized area of 50,000 or more and total area population of at least 100,000. Additional contiguous counties are included in the MSA if they are economically integrated with the core county or counties.

Data from the 1997 Census of Agriculture indicate that one-third of all farms are located in metro areas and that they control 39 percent of farm assets. Agriculture in metro areas includes a relatively large group of farmers who operate small-scale farms and earn a large share of household income from off-farm sources; a smaller group of farmers who are more focused on high-value production (e.g., fresh fruits and vegetables); and a residual group of larger scale livestock and crop farmers. Metro area farms tend to be smaller, on average, than farms in rural areas, and most U.S. farmland operated in 1997—82 percent—was located outside metropolitan areas.

Implications for Agriculture

Farmland owners in urbanizing areas are making land use and production decisions against the backdrop of a changing landscape and economic environment. In urban fringe areas, significant population growth can arise from immigration or from relocation from cities. Coupled with rising incomes and land values, population growth can lead to rapid increases in demand for developable land. This can also increase demand for agricultural products to meet urban needs (e.g., nursery or greenhouse products and locally grown fresh produce). A farmer may adapt to the pressure by switching to higher value production enterprises or may sell the farm for development as the costs of forgoing this opportunity rise. Because farm real estate dominates total farm assets and land values are a factor in land use changes, one of the greatest impacts of smart growth policies on local agriculture will be the effects on farmland values.

In understanding the effect of smart growth policies on agriculture in states that have adopted or plan to adopt smart growth strategies, an underlying question is "How do the new or proposed smart growth policies differ from existing policies?" This is particularly important since

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land use authority remains vested in local, not state, governments. If smart growth policies are primarily a repackaging of existing policies, or if incentives to adopt new strategies are insufficient, responses of developers, landowners, and local governments may be minimal.

For example, if removing state funding for projects outside growth areas results in little additional cost to developers, they have little incentive to redirect their development plans. In this case, local farmland owners may experience little change in the high rate of appreciation of land values, pressures to convert land, and incentives to switch enterprises. However, if the relative cost of building outside the boundaries is large enough to deter projects there, developers are more likely to focus their demand for land inside growth areas. This might be accomplished through additional local impact fees imposed to offset infrastructure costs associated with new development outside growth areas.

Assuming smart growth policies represent a significant departure from the status quo, effects on farming operations will depend partly on their location relative to growth areas. Outside growth areas, as development becomes relatively more expensive due to the redirecting of state infrastructure funding, demand for developable land is likely to decline. This in turn is likely to dampen the growth of agricultural land values, to slow the conversion of agricultural land outside growth areas, and to minimize additional (but not existing) road congestion on secondary roads as well as problems stemming from proximity to nonfarm neighbors (e.g., trespassing and nuisance complaints). Conversely, agricultural land values within growth areas are likely to rise more rapidly—and the conversion dates to occur sooner—in response to the increased demand for developable land.

In addition to changing the relative cost of developing outside vs. within growth areas, smart growth policies have the potential to affect agricultural land values by altering developers' and farmland owners' expectations about where local governments are likely to approve new development. Any change in local government policies in response to smart growth legis-

lation could affect perceptions about the ease (or difficulty) of obtaining variances or zoning changes to allow more development within or outside growth areas. Landowners and developers will also form expectations—reflected in land values—about the location of local government projects that occur without state funding and that stimulate demand for housing, commercial, or industrial uses.

Establishing growth areas may benefit the local agricultural economy if landowners outside the boundaries keep land in a productive agricultural use and can gain added income by marketing their output to the urbanized areas. However, not all farmland owners will welcome policies that reduce development pressures—e.g., farmers who view their investment in land and its appreciation in value over time as their “retirement fund.” These farmers may not benefit financially from smart growth policies unless their land is located within an existing or planned growth area.

Despite smart growth policies, substantial development can still occur at lower densities in outlying rural areas, where allocations of state funding for housing programs are historically minimal. To address this problem, governments may rely on farmland preservation programs to counter losses of local farmland and open space. The American Farmland Trust reports that 19 states already have state-level farmland preservation programs in place and that 11 of these also have locally sponsored programs. Some of these programs have existed since the 1970's, permanently preserving hundreds or thousands of acres annually.

The most significant effect of these preservation programs on local agriculture is that by restricting development on enrolled parcels, preserved land remains available for farming uses. Also, the use of ranking or bonus schemes in PDR programs gives governments some ability to influence which types of farms and agricultural land are preserved first. This targeting is possible when interest in selling development rights is high and governments operating PDR programs have limited budgets. For example, prioritizing development rights purchases on land that is most threatened with development may

focus preservation on farms specializing in high-value enterprises or small-scale, part-time operations; prioritizing PDR purchases on parcels with important processing facilities or prime soils for row crops may focus on acreage in larger crop and livestock operations.

Because the sale of development rights essentially removes the development potential from enrolled parcels, preservation program administrators expect that land values of these parcels will be lower than land values of unrestricted parcels. This is expected to benefit the local farm economy because it can reduce land acquisition costs for new farm entrants.

However, buyers of preserved land who are part-time farmers with substantial nonfarm income and sufficient financial resources may outbid full-time farmers for the land, beyond its farm use value. A study of preserved farmland values in Maryland suggests the downward price effect may not be as significant as hoped. Programs that specify a minimum acreage requirement may limit upward price pressures (e.g., requiring parcels to be at least 100 acres) if they do not also permit subdivision into smaller (e.g., 25-acre) parcels.

Farmland preservation programs also have important implications for landowners. Current landowners who might otherwise sell the entire farm for development now have the option to sell only the development rights through a PDR or TDR program and to sell the land itself in a separate transaction—minus the development potential. For landowners who stay in farming, the ability to liquidate part of their investment in farm real estate, i.e., the development rights, provides a means for paying down farm debt or financing farm operations. It can also ease estate planning and transferring assets to future generations by allowing landowners to liquidate and/or distribute part of the real estate asset and lower the estate tax bill.

Although farmland preservation programs are generally designed to preserve land into perpetuity, enabling legislation often contains an escape clause. For example, a farm may be withdrawn from the program after a specified number of years if the land can no longer be profitably farmed.

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Examples of Smart Growth Policies

Urban growth boundaries. Oregon pioneered this strategy in the 1970's to discourage urban sprawl. Oregon's statewide plan mandated the designation of urban growth boundaries within which urban development would take place. Although this policy has not entirely curtailed development outside the boundaries, Oregon is recognized as the most successful in separating rural and urban uses geographically. In Washington state, cities and counties exceeding a certain size or experiencing rapid population increases are required to designate urban growth areas.

Designation of priority funding areas. Maryland requires counties to designate priority areas for receiving state funds. Eligibility is limited to areas meeting guidelines for residential densities, for intended use, and for availability of plans for sewer and water systems.

Coordinating transportation systems and development. In 1998, Tennessee passed a law directing that funding under the Federal Transportation Equity Act for the 21st Century (TEA-21) be reserved exclusively for localities that have growth plans identifying urban growth boundaries for cities, planned growth areas, and rural areas.

Farmland/environmental resource preservation. Maryland is one of several states with a well-established state-level farmland preservation program. In addition, Maryland's 1997 smart growth initiative included the Rural Legacy Program. The program has identified 23 areas where it is focusing

efforts to preserve large, contiguous blocks of parcels and strategic areas that contain multiple resources of value such as prime farmland and wildlife habitat. Through this program, the state partners with local governments and land trusts (public and private nonprofit) to purchase development rights (called easements) from willing landowners.

Multijurisdictional planning. Wisconsin gives state funding priority to local governments that address the needs of adjacent communities in their development plans instead of just pursuing their own interests.

Brownfields redevelopment. In 1998, New Jersey enacted the Brownfield and Contaminated Site Remediation Act which, in addition to limiting liability for redevelopers, provides financial incentives for remediation and redevelopment of "brownfields"—i.e., areas contaminated with toxic materials. Other states and localities have also developed brownfield programs to facilitate revitalization and redevelopment of land and resources in targeted urban areas.

Neighborhood business development. Consistent with state planning goals, a task force in South Providence, Rhode Island, adopted a program that provides state-funded assistance to new small businesses locating in one of its 10 state-designated enterprise zones. Maryland's program provides income tax credits as incentives for small businesses to locate in its priority funding areas.

While this may appear to reduce the financial risk of owning restricted-use land for current and future landowners, withdrawal may not be an economically advantageous option if the landowner is required to repay the value of the development rights based on current appraisals.

Permanent preservation of farmland also affects the market value of adjacent land. Some evidence suggests that homebuyers are willing to pay more to live in close proximity to open space, so it is possible that permanent preservation could attract development. This could invite conflict between farmers and nonfarm neighbors that program administrators hope to avoid. The answer to this dilemma may be additional development policies in rural areas, such as requiring clustering of houses and strong right-to-farm laws (e.g., to protect farmers from nuisance suits), which could be coupled with preservation programs.

States with pre-existing land preservation programs have used new programs established as a part of a smart growth legislative package to further direct preservation efforts to parcels with unique characteristics or in particular locations. States may also partner with the Federal and local governments or land trusts to preserve large blocks of land instead of just individual farms. These programs can result in lands being preserved for agriculture and, if the landowners agree, providing additional restrictions on use that preserve wildlife habitat, ecosystems, or other unique resources.

Smart growth policies have the potential to direct some development toward designated growth areas and to preserve farmland and other environmental resources. However, smart growth policies could represent a "mixed bag" for some landowners.

Clearly defined growth areas could reduce development pressures on farmland and

growth in farmland values outside the boundaries. This could benefit local agriculture by slowing the rate of farmland conversion. But farmland owners outside growth area boundaries may not gain from policies that slow a rise in land values. Nevertheless, an ability to sell development rights would give them an alternative for increasing liquidity (e.g., for servicing debt) without having to sell housing lots or the entire farm.

Farmland preservation programs may benefit the local agricultural economy more directly, but the effects will depend on program eligibility criteria and targeting mechanisms used to prioritize purchases of development rights. The impacts of growth boundaries as well as farmland preservation programs will depend largely on whether farmland remains in an active agricultural use. **AO**

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Statistical Indicators

Summary Data

Table 1—Key Statistical Indicators of the Food & Fiber Sector

	2000							2001		
	1999	2000	2001	I	II	III	IV	I	II	III
Prices received by farmers (1990-92=100)	96	97	--	93	101	97	96	--	--	--
Livestock & products	95	98	--	95	100	98	99	--	--	--
Crops	97	96	--	92	102	96	95	--	--	--
Prices paid by farmers (1990-92=100)										
Production items	111	116	--	115	116	116	117	--	--	--
Commodities and services, interest, taxes, and wage rates (PPITW)	115	120	--	119	119	119	121	--	--	--
Cash receipts (\$ bil.)	189	196	200	47	44	48	57	48	43	51
Livestock	95	99	100	25	25	25	25	25	25	25
Crops	93	97	100	22	18	24	32	23	19	26
Market basket (1982-84=100)										
Retail cost	167	171	--	169	169	172	173	--	--	--
Farm value	98	97	--	95	96	97	100	--	--	--
Spread	205	210	--	209	209	211	212	--	--	--
Farm value/retail cost (%)	21	20	--	20	20	20	20	--	--	--
Retail prices (1982-84=100)										
All food	164	168	172	166	167	169	170	171	172	172
At home	164	168	171	166	167	169	170	171	171	172
Away from home	165	169	173	168	168	170	171	172	173	174
Agricultural exports (\$ bil.) ¹	49.2	50.9	53.0	13.1	12.0	12.2	14.0	13.5	13.0	12.5
Agricultural imports (\$ bil.) ¹	37.3	38.9	40.0	10.1	10.2	9.1	9.7	10.1	10.1	10.1
Commercial production										
Red meat (mil. lb.)	46,134	46,150	45,307	11,605	11,288	11,623	11,634	11,108	11,329	11,567
Poultry (mil. lb.)	35,590	36,416	37,125	9,019	9,286	8,970	9,141	9,105	9,460	9,230
Eggs (mil. doz.)	6,912	7,035	7,085	1,754	1,744	1,751	1,786	1,760	1,745	1,760
Milk (bil. lb.)	162.7	167.7	167.5	42.6	43.2	41.2	40.7	41.9	43.4	41.1
Consumption, per capita										
Red meat and poultry (lb.)	220.3	219.4	217.6	53.8	54.9	54.9	55.8	52.9	54.7	54.6
Corn beginning stocks (mil. bu.) ²	1,307.8	1,787.0	1,717.5	3,616.2	1,787.0	8,039.4	5,601.9	3,585.9	1,717.5	8,517.6
Corn use (mil. bu.) ²	9,298.3	9,514.8	9,805.0	1,831.1	3,181.7	2,441.0	2,021.5	1,870.7	3,169.6	--
Prices ³										
Choice steers--Neb. Direct (\$/cwt)	65.56	69.65	73-78	69.32	71.59	65.43	72.26	78-79	71-75	72-78
Barrows and gilts--IA, So. MN (\$/cwt)	34.00	44.70	40-43	41.14	50.43	46.43	40.78	41-42	44-46	42-46
Broilers--12-city (cents/lb.)	58.10	56.20	56-60	54.60	55.70	56.80	57.60	57-58	57-59	57-61
Eggs--NY gr. A large (cents/doz.)	65.60	68.90	73-78	63.30	62.10	67.10	83.10	75-76	68-72	74-80
Milk--all at plant (\$/cwt)	14.36	12.34	13.05-	11.90	12.03	12.70	12.73	13.20-	12.60-	12.70-
		0.00						13.40	13.10	13.50
Wheat--KC HRW ordinary (\$/bu.)	2.92	3.08	--	2.83	2.92	2.95	3.00	3.44	--	--
Corn--Chicago (\$/bu.)	2.01	1.97	--	1.91	2.12	2.16	1.64	2.01	--	--
Soybeans--Chicago (\$/bu.)	4.61	4.86	--	4.95	5.20	4.60	4.70	--	--	--
Cotton--avg. spot 41-34 (cents/lb)	52.31	57.47	--	54.63	55.68	58.36	61.24	--	--	--
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Farm real estate values ⁴										
Nominal (\$ per acre)	703	713	740	798	844	887	926	974	1,020	1,050
Real (1982 \$)	521	507	514	540	558	572	586	606	627	636
U.S. civilian employment (mil.) ⁵	126.3	128.1	129.2	131.1	132.3	133.9	136.3	137.7	139.4	--
Food and fiber (mil.)	23.7	23.1	23.6	24.2	24.5	24.2	24.1	24.0	24.3	--
Farm sector (mil.)	2.0	1.9	1.8	1.9	2.0	2.0	1.9	1.8	1.7	--
U.S. gross domestic product (\$ bil.)	5,986.2	6,318.9	6,642.3	7,054.3	7,400.5	7,813.2	8,318.4	8,790.2	9,299.2	--
Food and fiber--net value added (\$ bil.)	877.5	924.8	965.7	1,066.2	1,126.5	1,210.4	1,317.1	1,446.4	1,521.4	--
Farm sector--net value added (\$ bil.) ⁶	71.1	75.5	73.1	78.3	75.3	86.7	83.5	74.8	69.8	--

-- = Not available. Annual and quarterly data for the most recent year contain forecasts. 1. Annual data based on Oct.-Sept. fiscal years ending with year indicated. 2. Sept.-Nov. first quarter; Dec.-Feb. second quarter; Mar.-May third quarter; Jun.-Aug. fourth quarter; Sept.-Aug. annual. Use includes exports and domestic disappearance. 3. Simple averages, Jan.-Dec. 4. As of January 1. 5. Civilian labor force taken from "Monthly Labor Review," Table 18--Annual Data: Employment Status of the Population, Bureau of Labor Statistics, U.S. Department of Labor. 6. The value-added data presented here are consistent with accounting conventions of the National Income and Product Accounts, U.S. Department of Commerce.

U.S. & Foreign Economic Data

Table 2—U.S. Gross Domestic Product & Related Data

	1999						2000			
	1998	1999	2000	II	III	IV	I	II	III	IV
<i>Billions of current dollars (quarterly data seasonally adjusted at annual rates)</i>										
Gross Domestic Product	8,790.2	9,299.2	9,962.7	9,191.5	9,340.9	9,559.7	9,752.7	9,945.7	10,039.4	10,112.8
Gross National Product	8,750.0	9,236.2	--	9,181.8	9,327.3	9,546.3	9,745.0	9,937.4	10,030.5	--
Personal consumption expenditures	5,850.9	6,268.7	6,757.3	6,213.2	6,319.9	6,446.2	6,621.7	6,706.3	6,810.8	6,890.4
Durable goods	693.9	761.3	820.5	756.3	767.2	787.6	826.3	814.3	824.7	816.5
Nondurable goods	1,707.6	1,845.5	2,009.7	1,825.3	1,860.0	1,910.2	1,963.9	1,997.6	2,031.5	2,045.8
Food	845.8	897.8	953.1	886.6	900.4	926.1	938.4	948.3	959.9	966.0
Clothing and shoes	286.4	307.0	328.3	306.1	308.7	311.9	323.1	325.6	330.9	333.5
Services	3,449.3	3,661.9	3,927.2	3,631.5	3,692.7	3,748.5	3,831.6	3,894.4	3,954.6	4,028.1
Gross private domestic investment	1,549.9	1,650.1	1,832.9	1,607.9	1,659.1	1,723.7	1,755.7	1,852.6	1,869.3	1,854.0
Fixed investment	1,472.9	1,606.8	1,777.4	1,593.4	1,622.4	1,651.0	1,725.8	1,780.5	1,803.0	1,800.4
Change in private inventories	77.0	43.3	55.5	14.5	36.7	72.7	29.9	72.0	66.4	53.5
Net exports of goods and services	-151.5	-254.0	-371.0	-240.4	-280.5	-299.1	-335.2	-355.4	-389.5	-403.9
Government consumption expenditures and gross investment	1,540.9	1,634.4	1,743.4	1,610.9	1,642.4	1,688.8	1,710.4	1,742.2	1,748.8	1,772.3
<i>Billions of 1996 dollars (quarterly data seasonally adjusted at annual rates)¹</i>										
Gross Domestic Product	8,515.7	8,875.8	9,318.6	8,783.2	8,905.8	9,084.1	9,191.8	9,318.9	9,369.5	9,394.2
Gross National Product	8,515.1	8,868.3	--	8,776.7	8,895.4	9,075.0	9,187.7	9,313.7	9,362.8	--
Personal consumption expenditures	5,678.7	5,978.8	6,294.4	5,940.2	6,013.8	6,101.0	6,213.5	6,260.6	6,329.8	6,373.7
Durable goods	727.3	817.8	896.2	810.5	826.2	851.8	898.2	886.7	903.2	896.7
Nondurable goods	1,684.8	1,779.4	1,868.7	1,765.0	1,786.1	1,818.1	1,844.8	1,861.1	1,882.6	1,886.4
Food	812.8	845.9	877.3	838.0	846.7	866.0	872.2	876.5	879.1	881.3
Clothing and shoes	292.2	318.5	345.1	316.5	322.1	322.1	337.7	342.3	350.2	349.9
Services	3,269.4	3,390.8	3,544.1	3,373.4	3,411.1	3,443.0	3,487.2	3,526.7	3,559.3	3,603.3
Gross private domestic investment	1,566.8	1,669.7	1,840.4	1,623.1	1,680.8	1,751.6	1,773.6	1,863.0	1,871.1	1,853.7
Fixed investment	1,485.3	1,621.4	1,771.3	1,607.1	1,637.8	1,666.6	1,730.9	1,777.6	1,791.3	1,785.5
Change in private inventories	80.2	45.3	61.8	13.1	39.1	80.9	36.6	78.6	72.5	59.5
Net exports of goods and services	-221.0	-322.4	-412.7	-314.6	-342.6	-352.5	-376.8	-403.4	-427.7	-442.9
Government consumption expenditures and gross investment	1,486.4	1,536.1	1,579.0	1,519.9	1,537.8	1,569.5	1,565.1	1,583.7	1,578.2	1,588.9
GDP implicit price deflator (% change)	1.3	1.5	2.0	1.4	0.9	1.3	3.3	2.4	1.6	1.9
Disposable personal income (\$ bil.)	6,320.0	6,637.7	6,989.3	6,596.3	6,664.5	6,775.0	6,866.5	6,964.9	7,040.9	7,084.7
Disposable pers. income (1996 \$ bil.)	6,134.1	6,331.0	6,510.6	6,306.6	6,341.7	6,412.2	6,443.1	6,502.0	6,543.7	6,553.4
Per capita disposable pers. income (\$)	23,359	24,314	25,376	24,196	24,384	24,728	25,014	25,322	25,535	25,633
Per capita disp. pers. income (1996 \$)	22,672	23,191	23,638	23,133	23,203	23,404	23,472	23,639	23,732	23,711
U.S. resident population plus Armed Forces overseas (mil.) ²	270.5	272.9	275.4	272.5	273.2	273.9	274.4	275.0	275.6	276.3
Civilian population (mil.) ²	269.0	271.5	273.9	271.1	271.7	272.4	273.0	273.5	274.2	274.9
<i>Monthly data seasonally adjusted</i>										
<i>Monthly data seasonally adjusted</i>										
Total industrial production (1992=100)	138.2	144.8	153.6	149.2	154.6	155.1	154.9	154.0	152.4	152.3
Leading economic indicators (1992=100)	105.4	108.8	--	110.6	109.7	109.8	109.4	109.1	108.5	109.4
Civilian employment (mil. persons) ³	131.5	133.5	135.2	135.0	134.9	135.3	135.5	135.5	135.8	136.0
Civilian unemployment rate (%) ³	4.5	4.2	4.0	4.0	4.1	3.9	3.9	4.0	4.0	4.2
Personal income (\$ bil. annual rate)	7,391.0	7,789.6	8,281.0	8,056.4	8,326.5	8,420.6	8,405.7	8,420.1	8,455.5	8,504.3
Money stock-M2 (daily avg.) (\$ bil.) ⁴	4,383.4	4,650.0	4,947.3	4,670.8	4,835.1	4,868.3	4,890.7	4,908.0	4,947.3	4,998.0
Three-month Treasury bill rate (%)	4.81	4.66	5.85	5.34	6.11	6.00	6.10	6.19	5.83	5.27
AAA corporate bond yield (Moody's) (%)	6.53	7.04	7.62	7.78	7.55	7.62	7.55	7.45	7.21	7.15
Total housing starts (1,000) ⁵	1,616.9	1,666.5	1,592.3	1,744	1,519	1,537	1,529	1,564	1,568	1,651
Business inventory/sales ratio ⁶	1.39	1.35	1.33	1.32	1.34	1.34	1.35	1.36	1.36	--
Sales of all retail stores (\$ bil.) ⁷	2,745.6	2,994.9	--	263.2	207.6	272.7	272.5	270.9	271.3	275.0
Nondurable goods stores (\$ bil.)	1,609.2	1,739.9	--	151.9	159.3	160.5	160.8	160.6	161.1	163.0
Food stores (\$ bil.)	435.4	458.3	--	38.8	40.4	40.6	40.8	40.8	41.2	41.3
Apparel and accessory stores (\$ bil.)	127.0	135.1	--	11.4	11.9	12.1	12.1	12.0	12.1	12.3
Eating and drinking places (\$ bil.)	266.4	285.4	--	25.0	25.5	25.8	25.7	25.8	25.8	26.6

-- = Not available. 1. In October 1999, 1996 dollars replaced 1992 dollars. 2. Population estimates based on 1990 census. 3. Data beginning January 1994 are not directly comparable with data for earlier periods because of a major redesign of the household survey questionnaire. 4. Annual data as of December of year listed. 5. Private, including farm. 6. Manufacturing and trade. 7. Annual total. *Information contact: David Johnson (202) 694-5324*

Table 3—World Economic Growth

	Calendar year									
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<i>Real GDP, annual percent change</i>										
World	1.5	3.1	2.7	3.1	3.4	2.1	2.9	4.0	2.5	3.4
less U.S.	1.1	2.7	2.8	3.0	3.1	1.3	2.4	3.7	2.7	3.3
Developed economies	0.9	2.8	2.3	2.7	3.1	2.4	2.8	3.6	1.9	2.8
less U.S.	0.1	2.3	2.2	2.2	2.4	1.5	2.0	2.8	1.8	2.5
United States	2.7	4.0	2.7	3.6	4.4	4.4	4.2	5.0	2.0	3.6
Canada	2.3	4.7	2.8	1.5	4.4	3.3	4.5	4.7	2.9	3.3
Japan	0.5	1.0	1.6	3.3	1.9	-1.1	0.8	1.7	0.3	1.4
Australia	3.7	5.2	3.8	4.1	4.0	5.3	4.7	3.7	1.9	3.8
European Union	-0.4	2.7	2.4	1.6	2.5	2.7	2.5	3.3	2.6	3.0
Transition economies	-6.6	-8.9	-1.5	-1.0	1.1	-1.5	2.3	5.7	3.7	4.0
Eastern Europe	1.0	2.9	5.7	4.2	2.4	1.8	2.0	3.8	3.6	4.4
Poland	3.8	5.2	7.0	6.1	6.9	4.8	4.0	4.2	3.5	4.5
Former Soviet Union	-10.0	-14.8	-5.9	-4.5	0.2	-4.0	2.5	7.2	3.8	3.6
Russia	-8.7	-12.6	-4.1	-3.5	0.8	-4.6	3.2	7.6	3.9	3.7
Developing economies	5.8	6.3	5.2	5.8	5.4	1.2	3.3	5.7	4.7	5.4
Asia	7.9	8.8	8.3	7.4	5.9	0.5	6.2	7.2	5.8	6.5
East Asia	9.1	9.8	8.8	7.8	7.0	2.0	7.5	8.2	6.3	6.8
China	13.5	12.6	10.5	9.6	8.8	7.8	7.1	8.0	7.8	8.6
Taiwan	7.0	7.1	6.4	6.1	6.7	4.6	5.4	6.0	4.4	5.0
Korea	5.5	8.2	8.9	6.7	5.0	-6.7	10.7	9.3	5.1	5.0
Southeast Asia	7.7	7.9	8.1	7.1	4.7	-6.2	3.6	5.7	4.3	5.5
Indonesia	7.3	7.5	8.2	7.8	4.7	-13.2	0.7	4.8	4.0	5.9
Malaysia	8.3	9.2	9.5	8.6	7.8	-7.2	5.6	8.6	5.8	6.0
Philippines	2.1	4.4	4.7	5.8	5.2	-0.5	3.2	4.0	2.2	3.8
Thailand	8.4	8.9	8.8	5.5	-0.4	-10.8	4.2	4.1	4.1	5.6
South Asia	4.5	7.0	7.4	6.7	4.4	5.7	5.7	6.0	6.0	6.5
India	5.0	7.9	8.0	7.3	5.0	6.1	6.3	6.4	6.4	7.1
Pakistan	1.9	3.9	5.1	4.7	-0.4	3.7	3.0	3.9	3.5	4.0
Latin America	4.3	5.3	1.3	3.6	5.1	1.9	0.0	3.8	4.1	4.2
Mexico	1.9	4.5	-6.2	5.1	6.8	4.8	3.7	6.9	4.7	4.5
Caribbean/Central	4.7	4.0	3.2	3.6	5.8	6.1	3.3	4.0	4.7	5.3
South America	4.9	5.6	3.1	3.3	4.8	1.2	-1.0	3.1	4.0	4.1
Argentina	5.9	5.8	-2.8	5.5	8.1	3.9	-3.1	0.1	1.2	1.9
Brazil	4.9	5.9	4.2	2.8	3.2	0.1	0.8	4.0	4.8	4.5
Colombia	5.4	5.8	5.2	2.0	2.8	0.6	-4.5	3.3	4.8	5.5
Venezuela	0.3	-2.3	3.7	-0.5	6.5	-0.7	-7.3	2.6	3.1	3.0
Middle East	3.9	-0.2	3.7	4.3	4.7	2.2	-1.4	4.5	0.6	3.9
Israel	5.6	6.9	7.0	4.6	2.2	1.9	2.1	5.4	2.8	4.0
Saudi Arabia	-0.6	0.5	0.5	1.4	1.9	2.3	-1.1	3.5	3.0	2.5
Turkey	8.7	-5.2	7.8	7.0	7.5	2.8	-5.1	6.1	-4.3	5.9
Africa	1.0	3.2	2.9	5.2	2.8	3.1	2.9	3.7	4.1	3.7
North Africa	0.5	3.9	1.5	6.5	2.6	5.6	3.9	4.4	4.7	4.1
Egypt	2.9	3.9	4.7	5.0	5.5	5.6	6.1	5.1	4.7	4.3
Sub-Saharan	1.4	2.6	3.9	4.3	2.9	1.3	2.2	3.3	3.6	3.3
South Africa	1.2	3.2	3.1	4.2	2.5	0.5	1.9	3.1	3.4	3.2
<i>Consumer prices, annual percent change</i>										
Developed economies	3.1	2.6	2.6	2.4	2.1	1.5	1.4	2.3	2.1	--
Transition economies	634.4	274.1	133.5	42.4	27.3	21.8	43.8	18.3	12.5	--
Developing economies	48.7	54.7	23.2	15.3	9.7	10.1	6.6	6.2	5.2	--
Asia	10.8	16.0	13.2	8.3	4.7	7.5	2.4	2.4	3.3	--
Latin America	194.6	200.3	36.0	21.6	13.4	10.2	9.3	8.9	7.0	--
Middle East	26.6	33.2	39.2	26.9	25.4	25.3	20.4	17.4	9.5	--
Africa	39.0	54.8	35.2	30.2	13.6	9.1	11.8	12.7	8.6	--

-- = Not available. The last 3 years are either estimates or forecasts. Sources: Oxford Economic Forecasting; International Financial Statistics, IMF.
 Information contact: Andy Jerardo (202) 694-5323, ajerardo@ers.usda.gov

Farm Prices

Table 4—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			2000					2001	
	1998	1999	2000	Feb	Sep	Oct	Nov	Dec	Jan	Feb
<i>1990-92=100</i>										
Prices received										
All farm products	101	96	97	93	98	93	98	98	97	99
All crops	107	97	96	92	98	91	97	96	94	97
Food grains	103	90	86	85	82	88	92	94	93	91
Feed grains and hay	100	86	86	88	78	80	85	90	89	89
Cotton	107	85	82	77	83	92	96	96	86	83
Tobacco	104	102	106	113	105	104	113	113	118	119
Oil-bearing crops	107	83	85	86	84	81	84	88	84	78
Fruit and nuts, all	113	117	103	94	124	120	107	85	91	92
Commercial vegetables	121	109	121	87	142	124	143	112	120	144
Potatoes and dry beans	99	100	95	99	81	76	77	78	78	85
Livestock and products	97	95	98	94	98	96	100	101	100	102
Meat animals	79	83	94	91	90	92	92	95	97	98
Dairy products	119	110	94	90	98	96	96	100	101	100
Poultry and eggs	117	111	110	104	116	107	119	114	105	112
Prices paid										
Commodities and services, interest, taxes, and wage rates (PPITW)	115	115	120	119	120	121	121	122	124	126
Production items	113	111	116	115	116	117	117	118	120	123
Feed	110	100	101	101	98	100	102	106	109	113
Livestock and poultry	88	95	110	109	105	111	112	115	111	108
Seeds	122	121	123	121	124	124	124	124	124	124
Fertilizer	112	105	110	106	113	115	116	119	134	153
Agricultural chemicals	122	121	120	120	120	120	119	120	127	135
Fuels	84	93	136	125	153	152	155	146	143	147
Supplies and repairs	119	121	124	123	124	124	125	125	126	126
Autos and trucks	119	119	119	119	118	118	119	119	120	120
Farm machinery	132	135	137	138	137	137	137	137	137	137
Building material	118	120	121	121	121	121	121	121	120	120
Farm services	115	116	118	117	119	119	118	118	119	119
Rent	120	113	113	113	113	113	113	113	114	114
Interest payable per acre on farm real estate debt	104	106	110	110	110	110	110	110	116	116
Taxes payable per acre on farm real estate	119	120	123	123	123	123	123	123	123	123
Wage rates (seasonally adjusted)	129	135	140	140	136	143	143	143	149	149
Prod. items, interest, taxes & wage rates (PITW)	114	113	118	117	118	119	119	120	123	125
Ratio, prices received to prices paid (%)*	88	83	81	78	82	77	81	80	78	79
Prices received (1910-14=100)	644	608	615	591	623	591	624	624	614	632
Prices paid, etc. (parity index) (1910-14=100)	1,532	1,531	1,592	1,578	1,592	1,609	1,612	1,621	1,651	1,672
Parity ratio (1910-14=100) (%)*	42	40	39	37	39	37	39	38	37	38

Values for the two most recent months are revised or preliminary. *Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio uses the most recent prices paid index. Data for this table are taken from the publication *Agricultural Prices*, which is produced monthly by USDA's National Agricultural Statistics Service (NASS) and is available at <http://usda.mannlib.cornell.edu/reports/nassr/price/pap-bb/>. For historical data or for categories not listed here, call the National Agricultural Statistics Service (NASS) Information Hotline at 1-800-727-9540, or access the NASS Home Page at <http://www.usda.gov/nass>.

Table 5—Prices Received by Farmers, U.S. Average

	Annual ¹			2000					2001	
	1997	1998	1999	Feb	Sep	Oct	Nov	Dec	Jan	Feb
Crops										
All wheat (\$/bu.)	3.38	2.65	2.55	2.54	2.44	2.68	2.83	2.87	2.85	2.83
Rice, rough (\$/cwt)	9.70	8.89	6.00	5.88	5.72	5.61	5.63	5.60	5.84	5.69
Corn (\$/bu.)	2.43	1.94	1.90	1.98	1.61	1.74	1.86	1.97	1.98	1.92
Sorghum (\$/cwt)	3.95	2.97	2.95	3.06	2.77	3.01	3.27	3.54	3.37	3.39
All hay, baled (\$/ton)	100.00	84.60	77.00	74.30	82.70	85.20	85.00	85.10	84.90	86.80
Soybeans (\$/bu.)	6.47	4.93	4.75	4.79	4.57	4.45	4.55	4.78	4.68	4.37
Cotton, upland (¢/lb.)	65.20	60.20	44.90	46.80	50.60	55.90	58.00	58.00	52.30	50.30
Potatoes (\$/cwt)	5.62	5.56	5.84	5.92	4.69	4.33	4.40	4.61	4.56	5.05
Lettuce (\$/cwt) ²	17.50	16.10	13.30	9.28	29.40	16.10	20.20	12.00	13.70	23.50
Tomatoes, fresh (\$/cwt) ²	31.70	35.20	25.90	23.50	27.80	42.60	46.10	33.00	43.80	30.10
Onions (\$/cwt)	12.60	13.80	9.78	5.63	11.70	11.00	10.60	11.60	13.90	14.20
Beans, dry edible (\$/cwt)	19.30	19.00	17.60	15.60	15.60	15.60	15.40	14.40	15.00	14.80
Apples for fresh use (¢/lb.)	22.10	17.30	21.20	20.30	23.30	21.80	18.50	18.10	16.10	15.20
Pears for fresh use (\$/ton)	276.00	291.00	294.00	402.00	317.00	377.00	378.00	301.00	340.00	251.00
Oranges, all uses (\$/box) ³	4.22	4.29	5.94	3.43	9.30	1.09	3.16	2.94	2.82	3.29
Grapefruit, all uses (\$/box) ³	1.93	2.00	3.22	4.31	6.71	5.17	3.09	2.20	1.87	2.07
Livestock										
Cattle, all beef (\$/cwt)	63.10	59.60	63.40	67.60	65.30	66.70	69.10	71.90	74.80	74.70
Calves (\$/cwt)	78.90	78.80	87.70	105.00	103.00	102.00	106.00	106.00	108.00	108.00
Hogs, all (\$/cwt)	52.90	34.40	30.30	39.90	41.50	41.40	36.40	39.80	37.20	38.60
Lambs (\$/cwt)	90.30	72.30	74.50	72.00	80.80	76.80	71.50	71.80	74.10	--
All milk, sold to plants (\$/cwt)	13.36	15.46	14.38	11.80	12.80	12.50	12.60	13.10	13.20	13.10
Milk, manuf. grade (\$/cwt)	12.17	14.24	12.86	10.20	11.20	10.80	10.40	10.80	10.90	11.10
Broilers, live (¢/lb.)	37.70	39.30	37.10	33.50	39.00	33.00	38.00	35.00	34.00	37.00
Eggs, all (¢/doz.) ⁴	70.30	66.80	62.70	68.60	60.30	68.50	74.00	83.30	67.20	68.20
Turkeys (¢/lb.)	39.90	38.00	40.80	35.70	44.50	45.90	47.00	40.50	36.60	36.30

-- = Not available. Values for the two most recent months are revised or preliminary. 1. Season-average price by crop year for crops. Calendar year average of monthly prices for livestock. 2. Excludes Hawaii. 3. Equivalent on-tree returns. 4. Average of all eggs sold by producers including hatching eggs and eggs sold at retail. Data for this table are taken from the publication *Agricultural Prices*, which is produced monthly by USDA's National Agricultural Statistics Service (NASS) and is available at <http://usda.mannlib.cornell.edu/reports/nassr/price/pap-bb/>. For historical data or for categories not listed here, call the National Agricultural Statistics Service (NASS) Information Hotline at 1-800-727-9540, or access the NASS Home Page at <http://www.usda.gov/nass>.

Producer & Consumer Prices

Table 6—Consumer Price Indexes for All Urban Consumers, U.S. Average (not seasonally adjusted)

	Annual			2000					2001	
	1998	1999	2000	Feb	Sep	Oct	Nov	Dec	Jan	Feb
<i>1982-84=100</i>										
Consumer Price Index, all items	163.0	166.6	172.1	169.7	173.7	174.0	174.1	174.0	175.1	175.8
CPI, all items less food	163.6	167.0	172.9	170.3	174.6	174.9	175.0	174.7	175.9	176.6
All food	160.7	164.1	167.8	166.3	168.9	169.1	168.9	170.0	170.9	171.3
Food away from home	161.1	165.1	169.0	167.6	170.0	170.3	170.4	170.8	171.4	171.8
Food at home	161.1	164.2	167.9	166.3	169.0	169.1	168.8	170.2	171.3	171.8
Meats ¹	141.6	142.3	150.7	146.4	153.8	152.9	152.5	152.9	154.1	156.5
Beef and veal	136.5	139.2	148.1	144.3	150.2	148.9	149.3	150.9	154.8	158.6
Pork	148.5	145.9	156.5	150.7	161.4	160.7	158.0	157.2	156.7	157.9
Poultry	157.1	157.9	159.8	157.9	160.9	162.1	157.2	160.7	160.8	161.8
Fish and seafood	181.7	185.3	190.4	190.0	191.9	192.8	189.6	189.5	192.8	193.0
Eggs	135.4	128.1	131.9	131.7	132.0	136.1	140.4	145.5	150.4	142.9
Dairy and related products ²	150.8	159.6	160.7	160.9	161.6	161.9	161.4	161.5	163.6	163.6
Fats and oils ³	146.9	148.3	147.4	145.6	148.7	149.7	146.5	150.2	153.0	152.6
Fresh fruits	246.5	266.3	258.3	263.0	258.2	262.6	262.8	269.0	261.8	253.5
Fresh vegetables	215.8	209.3	219.4	211.0	218.9	218.6	224.6	240.2	235.9	240.6
Potatoes	185.2	193.1	196.3	198.1	195.4	191.5	181.2	179.4	186.6	186.8
Cereals and bakery products	181.1	185.0	188.3	186.0	188.6	190.1	189.0	190.7	191.1	191.9
Sugar and sweets	150.2	152.3	154.0	154.4	154.6	153.9	153.0	153.5	155.7	155.8
Nonalcoholic beverages ⁴	133.0	134.3	137.8	138.4	138.0	137.4	137.9	136.7	139.4	139.9
Apparel										
Footwear	128.0	125.7	123.8	122.1	124.9	125.3	125.4	123.8	121.4	122.6
Tobacco and smoking products	274.8	355.8	394.9	383.0	408.0	396.7	411.0	396.6	404.3	408.5
Alcoholic beverages	165.7	169.7	174.7	173.0	175.5	175.9	176.4	176.5	177.2	177.7

1. Beef, veal, lamb, pork, and processed meat. 2. Included butter through December 1997. 3. Includes butter as of January 1998. 4. Includes fruit juices as of January 1998. This table is compiled with data provided by the Bureau of Labor Statistics (BLS). BLS operates a website at <http://stats.bls.gov/bls/home.html> and a Consumer Prices Information Hotline at (202) 606-7828.

Table 7—Producer Price Indexes, U.S. Average (not seasonally adjusted)

	Annual			2000					2001	
	1997	1998	1999	Feb	Sep	Oct	Nov	Dec	Jan	Feb
<i>1982=100</i>										
All commodities	127.6	124.4	125.5	129.8	134.7	135.4	134.6	135.7	138.8	136.5
Finished goods ¹	131.8	130.6	133.0	136.0	139.4	140.1	139.9	139.7	141.2	141.5
All foods ²	132.8	132.4	132.2	131.9	133.0	133.8	133.7	133.6	134.1	135.3
Consumer foods	134.5	134.3	135.1	136.0	137.4	138.0	138.1	137.9	138.4	139.5
Fresh fruits and melons	99.4	90.0	103.6	100.0	92.3	95.6	90.7	92.5	96.5	88.5
Fresh and dry vegetables	123.1	139.5	118.0	107.6	138.0	143.9	149.7	110.8	128.8	145.8
Dried and dehydrated fruits	124.9	124.4	121.2	122.4	122.5	125.3	125.3	119.7	121.8	121.9
Canned fruits and juices	137.6	134.4	137.8	140.2	140.1	139.7	140.2	140.5	142.2	142.4
Frozen fruits, juices and ades	117.2	116.1	123.0	123.9	118.1	116.8	116.3	116.1	116.4	115.8
Fresh veg. except potatoes	121.3	137.9	117.7	100.5	155.9	165.0	174.5	121.7	147.0	171.3
Canned vegetables and juices	120.1	121.5	120.9	120.8	121.1	121.6	121.7	121.5	121.1	121.4
Frozen vegetables	125.8	125.4	126.1	126.2	126.2	126.9	125.8	126.7	125.9	128.5
Potatoes	106.1	122.5	126.9	111.0	98.7	93.4	92.3	90.8	88.4	86.6
Eggs for fresh use (1991=100)	97.1	90.1	77.9	95.3	77.7	90.7	99.7	109.3	95.7	89.6
Bakery products	173.9	175.8	178.0	180.2	183.2	184.1	185.0	184.6	185.0	185.8
Meats	111.6	101.4	104.6	111.2	111.7	112.2	112.1	115.1	115.6	117.4
Beef and veal	102.8	99.5	106.3	110.1	110.0	112.3	114.5	118.9	121.9	123.1
Pork	123.1	96.6	96.0	110.2	110.1	109.1	105.0	109.1	104.9	108.5
Processed poultry	117.4	120.7	114.0	109.2	116.6	116.4	116.8	113.6	109.3	112.2
Unprocessed and packaged fish	178.1	183.0	190.9	207.8	190.3	194.4	189.6	192.5	193.1	211.4
Dairy products	128.1	138.1	139.2	130.7	135.6	134.4	135.6	136.8	136.8	136.1
Processed fruits and vegetables	126.4	125.8	128.1	129.1	128.1	128.2	127.7	127.4	127.6	128.1
Shortening and cooking oil	137.8	143.4	140.4	133.0	131.8	133.0	133.1	132.4	129.6	129.2
Soft drinks	133.2	134.8	137.9	143.2	144.2	144.3	144.7	144.3	146.6	146.8
Finished consumer goods less foods	128.2	126.4	130.5	135.4	141.1	141.6	141.2	140.8	143.3	143.6
Alcoholic beverages	135.1	135.2	136.7	138.2	142.1	142.8	141.7	143.5	143.4	143.2
Apparel	125.7	126.6	127.1	127.4	127.6	127.6	127.2	127.1	127.0	127.0
Footwear	143.7	144.7	144.5	144.8	145.1	145.1	145.1	145.5	144.9	146.2
Tobacco products	248.9	283.4	374.0	400.0	402.9	403.8	403.9	404.2	426.7	426.9
Intermediate materials ³	125.6	123.0	123.2	126.9	131.1	130.8	130.5	130.6	131.5	131.3
Materials for food manufacturing	123.2	123.1	120.8	117.5	119.0	119.1	118.8	119.8	120.4	120.3
Flour	118.7	109.2	104.3	102.3	103.6	107.8	107.2	106.1	107.5	107.0
Refined sugar ⁴	123.6	119.8	121.0	113.9	108.7	106.2	106.0	106.0	107.7	110.4
Crude vegetable oils	116.6	131.1	90.2	75.6	70.0	68.0	65.9	63.8	61.1	59.3
Crude materials ⁵	111.1	96.7	98.2	110.3	126.0	130.3	125.5	136.2	155.0	133.2
Foodstuffs and feedstuffs	112.2	103.8	98.7	97.6	97.6	99.5	100.5	103.9	105.3	104.5
Fruits and vegetables and nuts ⁶	115.5	117.2	117.4	108.4	115.9	121.5	120.3	106.0	115.5	117.6
Grains	111.2	93.4	80.1	82.4	70.1	76.3	81.2	81.2	86.6	80.5
Slaughter livestock	96.3	82.3	86.4	92.4	91.1	93.1	94.3	100.9	100.9	102.3
Slaughter poultry, live	131.0	141.4	129.9	113.4	133.6	130.8	134.7	129.1	124.3	123.6
Plant and animal fibers	117.0	110.4	86.5	88.1	99.3	101.4	101.2	100.2	92.8	92.1
Fluid milk	97.5	112.6	106.3	88.6	96.1	93.8	90.7	96.6	100.2	97.5
Oilseeds	140.8	114.4	90.8	94.7	92.5	89.9	89.9	94.7	93.6	86.5
Leaf tobacco	105.1	104.6	101.6	112.0	107.0	106.4	104.3	115.8	119.9	121.4
Raw cane sugar	116.8	117.2	113.7	93.6	99.9	110.5	113.8	109.3	112.2	122.1

1. Commodities ready for sale to ultimate consumer. 2. Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). 3. Commodities requiring further processing to become finished goods. 4. All types and sizes of refined sugar. 5. Products entering market for the first time that have not been manufactured at that point. 6. Fresh and dried.

This table is compiled with data provided by the Bureau of Labor Statistics (BLS). BLS operates a website at <http://stats.bls.gov/blshtml> and a Producer Prices Information Hotline at (202) 606-7705.

Farm-Retail Price Spreads

Table 8—Farm-Retail Price Spreads

	Annual			1999		2000				
	1998	1999	2000	Dec	Jul	Aug	Sep	Oct	Nov	Dec
Market basket ¹										
Retail cost (1982-84=100)	163.1	167.3	170.6	168.7	170.8	171.7	171.9	172.3	171.9	174.0
Farm value (1982-84=100)	103.3	98.3	97.0	95.2	96.1	97.3	98.8	97.4	100.6	101.4
Farm-retail spread (1982-84=100)	195.4	204.5	210.2	208.3	211.0	211.8	211.3	212.6	210.4	213.1
Farm value-retail cost (%)	22.2	20.6	19.9	19.8	19.7	19.8	20.1	19.8	20.5	20.4
Meat products										
Retail cost (1982-84=100)	141.6	142.3	150.4	145.3	152.7	153.9	153.8	152.9	152.5	152.9
Farm value (1982-84=100)	84.8	81.6	88.4	85.7	88.9	89.4	89.8	89.9	90.7	90.7
Farm-retail spread (1982-84=100)	200.0	204.7	214.0	206.5	218.1	220.1	219.4	217.5	215.9	216.7
Farm value-retail cost (%)	30.3	29	29.8	29.9	29.5	29.4	29.6	29.8	30.1	30.1
Dairy products										
Retail cost (1982-84=100)	150.8	159.6	160.7	162.1	160.5	161.0	161.6	161.9	161.4	161.5
Farm value (1982-84=100)	113.0	107.9	98.8	92.8	101.7	101.1	102.9	101.2	102.1	106.1
Farm-retail spread (1982-84=100)	185.6	207.2	217.7	226.0	214.7	216.3	215.8	217.9	216.1	212.6
Farm value-retail cost (%)	36.0	32.4	29.5	27.5	30.4	30.1	30.5	30.0	30.3	31.5
Poultry										
Retail cost (1982-84=100)	157.1	157.9	159.8	157.5	161.8	161.3	160.9	162.1	157.2	160.7
Farm value (1982-84=100)	126.1	119	117.4	120.2	121.9	115.6	127.2	111.6	125.7	114.5
Farm-retail spread (1982-84=100)	192.9	202.7	208.7	200.5	207.7	213.9	199.7	220.2	193.4	213.9
Farm value-retail cost (%)	42.9	40.3	39.3	40.8	40.3	38.4	42.3	36.9	42.8	38.1
Eggs										
Retail cost (1982-84=100)	137.1	128.1	131.9	124.0	125.5	130.5	132.0	136.1	140.4	145.5
Farm value (1982-84=100)	89.6	74.9	80.6	74.4	64.3	87.1	71.8	88.9	100.4	119.3
Farm-retail spread (1982-84=100)	222.5	223.7	223.9	213.0	235.5	208.4	240.1	220.9	212.3	192.6
Farm value-retail cost (%)	42.0	37.6	39.3	38.6	32.9	42.9	35.0	42.0	45.9	52.7
Cereal and bakery products										
Retail cost (1982-84=100)	181.1	185.0	188.3	185.9	189.6	189.9	188.6	190.1	189.0	190.7
Farm value (1982-84=100)	94.4	82.5	75.2	75.1	70.0	71.8	72.3	76.5	79.6	77.4
Farm-retail spread (1982-84=100)	193.2	199.2	204.0	201.4	206.3	206.4	204.8	205.9	204.3	206.5
Farm value-retail cost (%)	6.4	5.5	4.9	4.9	4.5	4.6	4.7	4.9	5.2	5.0
Fresh fruit										
Retail cost (1982-84=100)	258.2	294.3	284.3	294.8	272.2	277.7	285.1	289.7	290.4	297.4
Farm value (1982-84=100)	141.3	153.7	141.3	144.2	115.8	132.8	140.4	140.4	140.5	143.7
Farm-retail spread (1982-84=100)	312.2	359.3	350.3	364.3	344.4	344.6	351.9	358.6	359.6	368.4
Farm value-retail cost (%)	17.3	16.5	15.7	15.5	13.4	15.1	15.6	14.9	15.3	15.3
Fresh vegetables										
Retail cost (1982-84=100)	215.8	209.3	219.4	214.0	216.7	217.3	218.9	218.6	224.6	240.2
Farm value (1982-84=100)	124.5	118.1	121.4	121.1	127.0	127.6	125.2	109.2	126.9	129.2
Farm-retail spread (1982-84=100)	262.7	256.2	269.8	261.8	262.8	263.4	267.1	274.9	274.8	297.3
Farm value-retail cost (%)	19.6	19.2	18.8	19.2	19.9	19.9	19.4	17.0	19.2	18.3
Processed fruits and vegetables										
Retail cost (1982-84=100)	150.6	154.8	153.6	154.7	154.5	155.3	154.2	155.7	152.6	153.8
Farm value (1982-84=100)	115.1	113.5	111.0	111.7	110.4	109.9	111.2	111.2	110.6	110.3
Farm-retail spread (1982-84=100)	161.7	167.7	166.9	168.1	168.3	169.5	167.6	169.7	165.7	167.4
Farm value-retail cost (%)	18.2	17.4	17.2	17.2	17.0	16.8	17.1	17.0	17.2	17.0
Fats and oils										
Retail cost (1982-84=100)	146.9	148.3	147.4	145.1	148.1	148.9	148.7	149.7	146.5	150.2
Farm value (1982-84=100)	118.9	89	80.9	78.2	80.6	79.1	78.6	76.6	76.2	73.8
Farm-retail spread (1982-84=100)	157.2	170	171.9	169.7	172.9	174.6	174.5	176.6	172.4	178.3
Farm value-retail cost (%)	21.8	16.2	14.8	14.5	14.6	14.3	14.2	13.8	14.0	13.2

See footnotes at end of table, next page.

Table 8—Farm-Retail Price Spreads (continued)

	Annual			2000					2001	
	1998	1999	2000	Feb	Sep	Oct	Nov	Dec	Jan	Feb
Beef, all fresh retail value (cents/lb.)	253.3	260.5	275.3	270.1	280.9	280.6	279.6	280.4	292.4	297.9
Beef, Choice										
Retail value (cents/lb.) ²	277.1	287.8	306.4	293.6	313.0	311.8	310.3	310.1	321.4	334.2
Wholesale value (cents/lb.) ³	153.8	171.6	182.3	174.5	168.6	174.4	182.8	197.6	202.5	201.5
Net farm value (cents/lb.) ⁴	130.8	141.1	149.0	146.5	136.6	143.6	152.4	163.5	167.7	171.0
Farm-retail spread (cents/lb.)	146.3	146.7	157.4	147.1	176.4	168.2	157.9	146.6	153.7	163.2
Wholesale-retail (cents/lb.) ⁵	123.3	116.2	124.1	119.1	144.4	137.4	127.5	112.5	118.9	132.7
Farm-wholesale (cents/lb.) ⁶	23.0	30.5	33.3	28.0	32.0	30.8	30.4	34.1	34.8	30.5
Farm value-retail value (%)	47.2	49.0	48.6	49.9	43.6	46.1	49.1	52.7	52.2	51.2
Pork										
Retail value (cents/lb.) ²	242.7	241.5	258.2	251.0	265.0	262.1	259.3	262.5	260.6	261.5
Wholesale value (cents/lb.) ³	97.3	99.0	114.5	110.1	111.9	114.3	108.1	111.1	107.9	107.7
Net farm value (cents/lb.) ⁴	61.2	60.4	79.4	74.1	77.2	76.3	67.0	73.5	68.6	73.7
Farm-retail spread (cents/lb.)	181.5	181.1	178.8	176.9	187.8	185.8	192.3	189.0	192.0	187.8
Wholesale-retail (cents/lb.) ⁵	145.4	142.5	143.7	140.9	153.1	147.8	151.2	151.4	152.7	153.8
Farm-wholesale (cents/lb.) ⁶	36.1	38.6	35.1	36.0	34.7	38.0	41.1	37.6	39.3	34.0
Farm value-retail value (%)	25.2	25.0	30.8	29.5	29.1	29.1	25.8	28.0	26.3	28.2

1. Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by the Bureau of Labor Statistics (BLS).

Farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for by-product. Farm values are based on prices at first point of sale, and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail value and farm value, represents charges for assembling, processing, transporting and distributing. 2. Weighted-average value of retail cuts from pork and Choice yield grade 3 beef. Prices from BLS. 3. Value of wholesale (boxed beef) and wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs and by-product values. 4. Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of by-products. 5. Charges for retailing and other marketing services such as wholesaling and in-city transportation. 6. Charges for livestock marketing, processing, and transportation. *Information contact: Veronica Jones (202) 694-5387, William F. Hahn (202) 694-5175*

Table 9—Price Indexes of Food Marketing Costs

	Annual			1999			2000			
	1998	1999	2000	II	III	IV	I	II	III	IV
1987=100*										
Labor—hourly earnings										
and benefits	490.4	503.3	514.0	503.5	504.2	506.7	508.2	512.0	514.1	521.8
Processing	499.3	511.4	525.0	512.1	513.4	515.6	518.1	523.4	526.9	531.5
Wholesaling	552.5	564.6	589.4	572.8	575.2	580.0	578.9	586.4	587.3	601.0
Retailing	454.1	465.8	469.9	464.2	463.8	465.4	467.1	467.8	465.2	477.3
Packaging and containers	395.5	399.4	412.0	396.4	403.0	407.7	410.3	410.6	413.5	413.7
Paperboard boxes and containers	365.2	373.0	407.7	368.3	380.2	387.8	391.9	413.0	412.4	413.5
Metal cans	487.9	486.6	452.5	486.6	486.6	486.6	489.5	440.1	440.1	440.1
Paper bags and related products	432.9	440.9	470.4	435.7	446.3	455.8	457.3	472.4	477.6	474.5
Plastic films and bottles	322.8	324.2	336.7	321.4	325.9	329.6	329.4	330.6	342.4	344.3
Glass containers	446.8	447.1	450.8	447.8	447.0	445.8	450.1	451.1	451.1	450.8
Metal foil	232.0	227.3	232.4	226.1	226.7	228.0	229.8	231.3	233.8	234.8
Transportation services	428.3	394.0	394.3	394.2	394.2	394.2	392.3	393.3	394.6	396.9
Advertising	624.5	623.7	635.7	622.9	623.9	625.6	633.6	635.0	635.7	638.6
Fuel and power	619.7	651.5	841.1	627.3	681.1	711.9	816.5	822.2	866.1	859.6
Electric	492.1	489.4	498.2	484.0	505.9	488.5	477.2	487.0	523.8	504.9
Petroleum	457.0	565.9	1,135.8	504.0	613.2	758.1	1,114.0	1,102.2	1,160.6	1,166.4
Natural gas	1,239.4	1,235.6	1,275.4	1,222.8	1,272.7	1,240.4	1,235.3	1,259.8	1,300.7	1,305.7
Communications, water and sewage	307.6	309.3	309.1	308.5	308.9	310.6	310.3	307.8	308.7	309.5
Rent	260.5	256.9	258.2	257.3	256.4	256.4	256.8	258.0	259.1	259.0
Maintenance and repair	529.3	541.6	561.2	540.7	542.5	545.3	552.2	558.3	564.7	569.7
Business services	522.9	531.9	544.6	530.2	533.3	536.1	540.3	543.2	545.9	548.8
Supplies	332.3	327.7	348.5	325.9	327.1	331.7	365.6	338.2	344.5	345.8
Property taxes and insurance	598.3	619.7	654.6	615.2	622.8	631.3	639.8	647.4	658.6	672.6
Interest, short-term	103.7	103.7	115.4	96.7	109.7	115.2	111.3	116.6	117.7	116.0
Total marketing cost index	467.2	472.2	491.5	470.7	475.2	479.1	486.7	488.8	493.1	497.2

Last two quarters preliminary. * Indexes measure changes in employee earnings and benefits and in prices of supplies used in processing, wholesaling, and retailing U.S. farm foods purchased for at-home consumption. *Information contact: Veronica Jones (202) 694-5387*

Livestock & Products

Table 10—U.S. Meat Supply & Use

	Beg. stocks	Produc- tion ¹	Imports	Total supply	Exports	Ending stocks	Consumption		Conversion factor ³	Primary market price ⁴
							Total	Per capita ²		
Beef										
1997	377	25,490	2,344	28,211	2,136	465	25,611	67	0.700	66.32
1998	465	25,760	2,643	28,868	2,171	393	26,305	68	0.700	61.48
1999	393	26,493	2,874	29,760	2,417	411	26,932	69	0.700	65.56
2000	411	26,888	3,032	30,331	2,516	525	27,290	69	0.700	69.65
2001	525	25,701	3,080	29,306	2,550	390	26,366	66	0.700	75.38
Pork										
1997	366	17,274	634	18,274	1,044	408	16,823	49	0.776	54.30
1998	408	19,011	705	20,124	1,230	584	18,309	53	0.776	34.72
1999	584	19,308	827	20,720	1,278	489	18,952	54	0.776	34.00
2000	489	18,952	967	20,408	1,305	477	18,626	52	0.776	44.70
2001	477	19,330	1,000	20,807	1,350	525	18,932	53	0.776	41.38
Veal ⁶										
1997	7	334	0	341	0	8	333	1	0.83	82
1998	8	262	0	270	0	5	265	1	0.83	82
1999	5	235	0	240	0	5	235	1	0.83	90
2000	5	225	0	230	0	5	225	1	0.83	106
2001	5	208	0	213	0	4	209	1	0.83	107
Lamb and mutton										
1997	9	260	83	352	6	14	332	1	0.89	88
1998	14	251	112	377	6	12	360	1	0.89	74
1999	12	248	113	372	5	9	358	1	0.89	76
2000	9	234	129	372	6	13	353	1	0.89	79
2001	13	217	135	365	4	10	351	1	0.89	81
Total red meat										
1997	759	43,358	3,061	47,178	3,185	894	43,099	118	--	--
1998	894	45,284	3,461	49,639	3,407	994	45,239	123	--	--
1999	994	46,284	3,813	51,092	3,700	914	46,477	125	--	--
2000	914	46,299	4,128	51,341	3,827	1,020	46,494	124	--	--
2001	1,020	45,456	4,215	50,691	3,904	929	45,858	121	--	--
										c/lb
Broilers										
1997	641	27,041	5	27,687	4,664	607	22,416	72	0.859	59
1998	607	27,612	5	28,225	4,673	711	22,841	73	0.859	63
1999	711	29,468	4	30,183	4,920	796	24,468	77	0.859	58
2000	796	30,199	6	31,001	5,548	798	24,655	77	0.859	56
2001	798	30,681	4	31,483	5,700	830	24,953	77	0.859	58
Mature chickens										
1997	6	510	0	516	384	7	125	1	1.0	--
1998	7	525	0	533	426	6	101	1	1.0	--
1999	6	554	0	562	393	8	162	1	1.0	--
2000	8	531	0	541	223	9	308	1	1.0	--
2001	9	524	0	535	200	10	325	1	1.0	--
Turkeys										
1997	328	5,412	1	5,741	606	415	4,720	18	1.0	65
1998	415	5,215	0	5,630	446	304	4,880	18	1.0	62
1999	304	5,230	1	5,535	379	254	4,902	18	1.0	69
2000	254	5,333	1	5,588	458	241	4,889	18	1.0	71
2001	241	5,528	1	5,770	460	275	5,034	18	1.0	68
Total poultry										
1997	975	32,964	6	33,944	5,654	1,029	27,261	90	--	--
1998	1,029	33,352	6	34,387	5,545	1,022	27,821	91	--	--
1999	1,022	35,252	7	36,281	5,692	1,058	29,531	96	--	--
2000	1,058	36,062	9	37,129	6,229	1,048	29,852	96	--	--
2001	1,048	36,733	7	37,788	6,360	1,115	30,311	97	--	--
Red meat and poultry										
1997	1,734	76,321	3,067	81,123	8,839	1,923	70,360	208	--	--
1998	1,923	78,637	3,467	84,027	8,951	2,016	73,060	214	--	--
1999	2,016	81,537	3,820	87,372	9,392	1,972	76,008	220	--	--
2000	1,972	82,361	4,137	88,470	10,056	2,068	76,346	219	--	--
2001	2,068	82,189	4,222	88,479	10,264	2,044	76,169	218	--	--

-- = Not available. Values for the last 2 years are forecasts. 1. Total including farm production for red meat and federally inspected plus nonfederally inspected for poultry. 2. Retail-weight basis. 3. Red meat, carcass to retail conversion; poultry, ready-to-cook production to retail weight. 4. Beef: Medium #1, Nebraska Direct 1,100-1,300 lb.; pork: barrows and gilts, Iowa, Southern Minnesota; veal: farm price of calves; lamb and mutton: choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 5. Carcass weight for red meats and certified ready-to-cook for poultry. 6. Beginning in 1989, veal trade is no longer reported separately. *Information contact: LaVerne Williams (202) 694-5190*

Table 11—U.S. Egg Supply & Use

	Beg. stocks	Production	Imports	Total supply	Exports	Hatching use	Ending stocks	Consumption		Primary market price*
								Total	Per capita	
									No.	
Million doz.								No.		¢/doz.
1994	10.7	6,177.6	3.7	6,192.0	187.6	805.4	14.9	5,184.1	238.7	67.3
1995	14.9	6,215.6	4.1	6,234.6	208.9	847.2	11.2	5,167.3	235.6	72.9
1996	11.2	6,350.7	5.4	6,367.3	253.1	863.8	8.5	5,241.8	236.8	88.2
1997	8.5	6,473.1	6.9	6,488.5	227.8	894.7	7.4	5,358.6	240.1	81.2
1998	7.4	6,657.9	5.8	6,671.2	218.8	921.8	8.4	5,522.2	244.9	75.8
1999	8.4	6,912.0	7.4	6,927.8	161.7	941.7	7.6	5,816.7	255.7	65.6
2000	7.6	7,034.6	8.4	7,050.6	171.8	940.2	11.4	5,927.2	258.2	68.9
2001	11.4	7,085.0	5.0	7,101.4	170.0	950.0	10.0	5,971.4	258.0	75.6

Values for the last year are forecasts. Values for previous year are preliminary. * Cartoned grade A large eggs, New York. *Information contact:* LaVerne Williams (202) 694-5190

Table 12—U.S. Milk Supply & Use¹

	Production	Farm use	Commercial		Imports	Total commercial supply	CCC net removals	Commercial		All milk price ¹	CCC net removals	
			Farm marketings	Beg. stocks				Ending stocks	Disappearance		Skim solids basis	Total solids basis ²
	Million lbs. (milkfat basis)									\$/cwt	Billion lbs.	
1993	150.6	1.8	148.8	4.7	2.8	156.3	6.6	4.5	145.1	12.80	3.9	5.0
1994	153.6	1.7	151.9	4.5	2.9	159.3	4.8	4.3	150.3	12.97	3.7	4.2
1995	155.3	1.6	153.7	4.3	2.9	160.9	2.1	4.1	154.9	12.74	4.4	3.5
1996	154.0	1.5	153.5	4.1	2.9	159.5	0.1	4.7	154.7	14.74	0.7	0.5
1997	156.1	1.4	154.7	4.7	2.7	162.1	1.1	4.9	156.1	13.34	3.7	2.7
1998	157.4	1.4	156.1	4.9	4.6	165.5	0.4	5.3	159.9	15.42	4.0	2.6
1999	162.7	1.4	161.3	5.3	4.7	171.4	0.3	6.1	164.9	14.36	6.5	4.0
2000	167.7	1.3	166.3	6.1	4.4	176.9	0.8	6.9	169.2	12.34	8.6	5.5
2001	167.5	1.3	166.2	6.9	4.4	177.5	0.4	6.5	170.6	13.25	5.0	3.2

Values for latest year are forecasts. Values for the preceding year are preliminary. 1. Delivered to plants and dealers; does not reflect deductions.

2. Arbitrarily weighted average of milkfat basis (40 percent) and solids basis (60 percent). *Information contact:* Jim Miller (202) 694-5184

Table 13—Poultry & Eggs

	Annual			2000							2001
	1998	1999	2000	Jan	Aug	Sep	Oct	Nov	Dec		Jan
Broilers											
Federally inspected slaughter certified (mil. lb.)	27,862.7	29,741.4	30,486.6	2,427.6	2,743.7	2,341.6	2,715.2	2,553.6	2,356.0		2,604.3
Wholesale price, 12-city (cents/lb.)	63.0	58.1	56.2	55.4	55.5	58.4	57.2	58.2	57.2		56.9
Price of grower feed (\$/ton) ¹	129.0	102.9	104.9	104.5	94.6	97.5	98.5	102.7	107.7		106.3
Broiler-feed price ratio ²	6.3	7.2	6.9	6.7	7.4	8.0	6.7	7.4	6.5		6.4
Stocks beginning of period (mil. lb.)	606.8	711.1	795.6	795.6	818.5	803.0	810.3	753.9	750.1		797.6
Broiler-type chicks hatched (mil.)	8,491.9	8,715.7	8,782.2	749.4	739.9	704.9	711.0	674.2	738.8		733.9
Turkeys											
Federally inspected slaughter certified (mil. lb.)	5,280.6	5,296.5	5,401.2	399.9	482.8	423.5	507.2	482.3	403.4		457.5
Wholesale price, Eastern U.S. 8-16 lb. young hens (cents/lb.)	62.2	69.0	70.5	61.6	73.6	76.5	78.7	79.6	70.3		61.5
Price of turkey grower feed (\$/ton) ¹	115.9	95.0	96.0	95.8	86.7	89.0	91.8	95.9	100.0		100.3
Turkey-feed price ratio ²	6.7	8.6	8.6	7.6	9.9	10.0	10.0	9.8	8.1		7.3
Stocks beginning of period (mil. lb.)	415.1	304.3	254.3	254.3	524.1	524.9	528.1	473.9	261.1		241.3
Poultz placed in U.S. (mil.)	297.8	296.1	298.2	24.7	24.8	23.0	23.7	23.4	23.3		25.5
Eggs											
Farm production (mil.)	79,927.0	82,943.0	84,412.0	7,157.0	7,104.0	6,854.0	7,130.0	7,027.0	7,279.0		7,210.0
Average number of layers (mil.)	313.0	322.9	328.2	328.6	325.8	326.2	328.2	330.7	332.0		333.2
Rate of lay (eggs per layer on farms)	255.3	256.8	257.2	21.8	21.8	21.0	21.7	21.3	21.9		21.6
Cartoned price, New York, grade A large (cents/doz.) ³	75.8	65.6	68.9	62.2	72.5	67.1	73.0	81.4	94.9		74.1
Price of laying feed (\$/ton) ¹	137.7	125.4	125.8	120.3	104.8	117.1	110.5	111.3	111.1		123.3
Egg-feed price ratio ²	9.8	9.8	10.6	8.9	13.0	10.3	12.4	13.3	15.0		10.9
Stocks, first of month											
Frozen (mil. doz.)	7.4	8.4	7.6	7.6	10.9	11.3	11.0	12.6	11.7		11.4
Replacement chicks hatched (mil.)	438.3	450.9	429.8	34.1	34.3	36.3	35.2	32.6	35.0		38.0

1. Calculated from price ratios that were revised February 1995. 2. Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight (revised February 1995). 3. Price of cartoned eggs to volume buyers for delivery to retailers. *Information contact:* LaVerne Williams (202) 694-5190

Table 14—Dairy

	Annual			2000						2001
	1998	1999	2000	Jan	Aug	Sep	Oct	Nov	Dec	Jan
Class III (BFP before 2000) 3.5% fat (\$/cwt.)	14.20	12.43	9.74	10.05	10.13	10.76	10.02	8.57	9.37	9.99
Wholesale prices										
Butter, Central States (cents/lb.) ¹	177.6	125.2	118.5	91.6	120.3	119.1	116.9	151.7	150.0	122.2
Am. cheese, Wis. assembly pt. (cents/lb.)	158.1	142.3	116.2	114.6	125.5	133.4	109.4	107.5	113.0	110.2
Nonfat dry milk (cents/lb.) ²	106.9	103.5	101.6	100.9	102.3	102.4	102.3	103.1	104.3	103.6
USDA net removals										
Total (mil. lb.) ³	365.6	343.5	841.4	88.4	45.9	37.8	33.8	83.7	49.0	30.6
Butter (mil. lb.)	6.3	3.7	8.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Am. cheese (mil. lb.)	8.2	4.6	28.0	0.4	1.5	0.9	1.2	6.7	4.2	1.6
Nonfat dry milk (mil. lb.)	326.4	540.6	692.6	60.3	50.5	40.1	50.4	45.5	44.8	70.6
Milk										
Milk prod. 20 states (mil. lb.)	134,900	140,062	144,528	12,259	11,928	11,451	11,813	11,385	11,855	12,073
Milk per cow (lb.)	17,502	18,109	18,532	1,579	1,525	1,464	1,511	1,459	1,519	1,550
Number of milk cows (1,000)	7,708	7,734	7,799	7,764	7,820	7,820	7,817	7,805	7,803	7,791
U.S. milk production (mil. lb.) ⁴	157,348	162,716	167,658	14,268	13,797	13,241	13,714	13,212	13,752	13,992
Stocks, beginning ³										
Total (mil. lb.)	4,907	5,301	6,179	6,179	10,971	9,912	9,037	7,966	6,964	7,002
Commercial (mil. lb.)	4,889	5,274	6,135	6,135	10,835	9,778	8,904	7,836	6,830	6,863
Government (mil. lb.)	18	28	44	44	135	134	133	130	134	139
Imports, total (mil. lb.) ³	4,588	4,772	4,445	265	443	300	359	383	352	--
Commercial disappearance (mil. lb.) ³	159,779	164,915	169,205	12,178	15,139	14,268	14,994	14,408	13,910	--
Butter										
Production (mil. lb.)	1,168.0	1,275.0	1,304.8	142.3	85.6	91.6	106.2	105.1	115.9	128.4
Stocks, beginning (mil. lb.)	20.5	25.9	24.9	24.9	136.5	100.9	84.6	58.0	27.1	24.0
Commercial disappearance (mil. lb.)	1,222.5	1,308.6	1,329.8	83.6	126.0	109.2	134.9	137.3	119.7	--
American cheese										
Production (mil. lb.)	3,314.7	3,576.5	3,678.3	316.7	301.6	287.6	295.4	283.8	299.4	300.6
Stocks, beginning (mil. lb.)	410.3	407.6	458.0	458.0	628.1	609.3	576.5	546.0	521.8	521.1
Commercial disappearance (mil. lb.)	3,338.6	3,586.1	3,632.5	265.0	327.2	321.1	325.4	303.6	299.1	--
Other cheese										
Production (mil. lb.)	4,177.5	4,367.5	4,585.4	370.2	384.9	367.5	396.2	388.1	390.6	377.9
Stocks, beginning (mil. lb.)	70.0	109.5	163.3	163.3	242.0	230.2	203.9	185.3	173.4	185.2
Commercial disappearance (mil. lb.)	4,452.0	4,678.1	4,928.1	338.9	427.1	424.2	452.4	440.2	414.4	--
Nonfat dry milk										
Production (mil. lb.)	1,135.4	1,378.2	1,460.4	133.6	104.5	96.3	100.6	98.9	119.0	117.5
Stocks, beginning (mil. lb.)	103.3	56.9	115.5	115.5	189.6	152.1	130.0	120.8	109.9	119.0
Commercial disappearance (mil. lb.)	866.9	791.1	771.1	43.1	92.2	78.8	59.6	65.0	65.1	--
Frozen dessert										
Production (mil. gal.) ⁵	1,324.3	1,311.8	1,304.6	83.8	123.1	103.3	103.0	87.1	79.6	90.3

-- = Not available. Quarterly values for latest year are preliminary. 1. Grade AA Chicago before June 1998. 2. Prices paid f.o.b. Central States production area. 3. Milk equivalent, fat basis. 4. Monthly data ERS estimates. 5. Hard ice cream, ice milk, and hard sherbet. *Information contact: LaVerne Williams (202) 694-5190*

Table 15—Wool

	Annual			1999			2000			
	1997	1998	1999	II	III	IV	I	II	III	IV
U.S. wool price (¢/lb.) ¹	238	162	110	116	110	98	97	120	117	96
Imported wool price (¢/lb.) ²	206	164	136	142	133	125	133	139	139	136
U.S. mill consumption, scoured										
Apparel wool (1,000 lb.)	130,386	98,373	65,468	16,815	15,793	13,633	17,142	15,655	14,132	13,365
Carpet wool (1,000 lb.)	13,576	16,331	15,017	3,581	3,183	2,966	3,784	3,327	3,650	3,753

1. Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" and up. 2. Wool price, Charleston, SC warehouse, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10 cents. *Information contact: Mae Dean Johnson (202) 694-5299*

Table 16—Meat Animals

	Annual			2000						2001	
	1998	1999	2000	Feb	Sep	Oct	Nov	Dec	Jan	Feb	
Cattle on feed (7 states, 1000+ head capacity)											
Number on feed (1,000 head) ¹	9,455	9,021	9,752	9,885	8,972	9,502	10,192	10,213	10,176	10,222	
Placed on feed (1,000 head)	19,697	21,446	21,875	1,606	2,286	2,387	1,678	1,440	1,965	1,331	
Marketings (1,000 head)	19,440	20,124	20,644	1,749	1,708	1,647	1,568	1,500	1,751	1,477	
Other disappearance (1,000 head)	691	676	907	47	48	50	89	77	68	64	
Market prices (\$/cwt)											
Slaughter cattle											
Choice steers, 1,100-1,300 lb.											
Texas	61.75	65.89	69.86	68.88	65.43	68.51	72.19	76.41	78.79	79.40	
Neb. direct	61.47	65.56	69.65	68.24	65.14	67.93	72.16	77.01	78.46	79.71	
Boning utility cows, Sioux Falls	36.20	38.40	41.71	38.88	41.88	38.25	39.38	42.19	41.75	43.34	
Feeder steers											
Medium no. 1, Oklahoma City											
600-650 lb.	78.13	82.64	94.36	94.63	89.27	89.45	93.73	95.29	92.96	97.67	
750-800 lb.	71.79	76.39	88.58	83.81	83.64	85.96	89.80	90.53	87.23	86.05	
Slaughter hogs											
Barrows and gilts, 51-52 percent lean											
National Base converted to live equiv.	34.72	34.00	34.02	41.58	43.49	43.09	37.84	41.40	38.61	41.47	
Sows, Iowa, S.MN 1-2 300-400 lb.	20.29	19.26	29.79	25.35	30.72	31.45	26.90	29.59	27.89	29.48	
Slaughter sheep and lambs											
Lambs, Choice, San Angelo	74.20	75.96	79.40	76.83	82.00	77.50	76.70	75.33	81.25	87.00	
Ewes, Good, San Angelo	40.86	42.45	46.23	51.92	43.43	43.18	45.85	47.17	51.88	56.75	
Feeder lambs											
Choice, San Angelo	79.86	80.74	95.86	99.54	93.89	92.00	103.65	102.17	109.63	117.00	
Wholesale meat prices, Midwest											
Boxed beef cut-out value											
Choice, 700-800 lb.	98.60	110.90	117.45	112.81	108.56	112.66	119.09	129.60	128.00	129.53	
Select, 700-800 lb.	92.19	101.99	101.99	106.88	102.08	102.02	110.29	120.50	121.70	125.01	
Canner and cutter cow beef	61.49	66.51	72.57	72.38	69.57	70.08	72.11	73.55	--	--	
Pork cutout	53.08	53.45	64.07	61.43	63.22	62.40	56.75	60.15	58.62	61.47	
Pork loins, bone-in, 1/4 " trim,14-19 lb.	101.63	100.38	117.13	110.66	119.22	119.90	104.19	114.68	110.80	114.32	
Pork bellies, 12-14 lb.	52.38	57.12	77.46	82.40	63.94	57.83	54.97	58.36	66.61	66.68	
Hams, bone-in, trimmed, 20-27 lb.	45.85	45.18	52.02	45.43	59.87	55.94	51.02	47.98	43.86	54.38	
All fresh beef retail price	253.28	260.50	275.30	270.10	280.90	280.60	279.60	280.40	292.40	297.90	
Commercial slaughter (1,000 head) ²											
Cattle	35,465	36,150	36,247	2,937	3,035	3,142	2,931	2,719	3,002	--	
Steers	17,428	17,932	18,060	1,396	1,516	1,479	1,393	1,305	1,423	--	
Heifers	11,448	11,868	12,041	1,046	1,022	1,100	972	896	979	--	
Cows	5,983	5,710	5,522	445	444	508	516	475	549	--	
Bull and stags	606	639	624	50	52	54	50	43	51	--	
Calves	1,458	1,282	1,132	95	93	97	92	92	91	--	
Sheep and lambs	3,804	3,701	3,455	294	269	279	296	301	269	--	
Hogs	101,029	101,544	97,955	8,077	8,118	8,881	8,757	8,094	8,643	--	
Barrows and gilts	97,025	97,732	94,585	7,816	7,840	8,579	8,458	7,829	8,339	--	
Commercial production (mil. lb.)											
Beef	25,653	26,386	26,776	2,175	2,275	2,345	2,169	1,998	2,205	--	
Veal	252	226	216	18	17	18	18	18	18	--	
Lamb and mutton	248	244	230	20	17	18	20	21	19	--	
Pork	18,981	19,278	18,905	1,558	1,552	1,715	1,712	1,583	1,693	--	
	Annual			1999		2000				2001	
	1998	1999	2000	III	IV	I	II	III	IV	I	
Hogs and pigs (U.S.) ³											
Inventory (1,000 head) ¹	61,158	62,206	59,342	60,776	60,776	59,342	57,782	59,137	60,065	59,848	
Breeding (1,000 head) ¹	6,957	6,682	6,234	6,515	6,301	6,234	6,190	6,234	6,246	6,275	
Market (1,000 head) ¹	54,200	55,523	53,109	54,380	54,474	53,109	51,593	52,904	53,280	53,573	
Farrowings (1,000 head)	12,061	11,641	11,462	2,920	2,844	2,798	2,890	2,899	2,875	2,906	
Pig crop (1,000 head)	105,004	102,354	101,354	25,862	24,973	24,522	25,610	25,686	25,536	--	
Cattle on feed, 7 states (1,000 head) ⁴											
Steers and steer calves	5,803	5,432	5,432	4,849	5,286	5,768	5,736	5,326	5,584	5,936	
Heifers and heifer calves	3,615	3,552	3,552	3,302	3,479	3,942	3,800	3,602	3,877	4,081	
Cows and bulls	59	37	37	44	28	42	37	31	41	59	

-- = Not available. 1. Beginning of period. 2. Classes estimated. 3. Quarters are Dec. of preceding year to Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 4. Beginning of period. The 7 states include AZ, CA, CO, IA, KS, NE, and TX. Information contact: Leland Southard (202) 694-5187

Table 17—Supply & Utilization^{1,2}See footnotes at end of table, next page

Table 17—Supply & Utilization (continued)

	Area			Yield	Production	Total supply ⁴	Feed & residual	Other domestic use	Exports	Total use	Ending stocks	Farm price ⁵
	Set-aside ³	Planted	Harvested									
	<i>Mil. acres</i>			<i>Lb./acre</i>				<i>Mil. bales</i>				<i>¢/lb.</i>
Cotton ⁹												
1996/97	1.7	14.7	12.9	705	18.9	22.0	--	11.1	6.9	18.0	4.0	69.3
1997/98	0.3	13.9	13.4	673	18.8	22.8	--	11.3	7.5	18.8	3.9	65.2
1998/99	--	13.4	10.7	625	13.9	18.2	--	10.4	4.3	14.7	3.9	60.2
1999/00*	--	14.9	13.4	607	17.0	21.0	--	10.2	6.8	17.0	3.9	45.0
2000/01*	--	15.5	13.1	631	17.2	21.2	--	9.5	6.9	16.4	4.8	--

-- = Not available or not applicable. *March 8, 2001 Supply and Demand Estimates. 1. Marketing year beginning June 1 for wheat, barley, and oats; August 1 for cotton and rice; September 1 for soybeans, corn, and sorghum; October 1 for soybean meal and soybean oil. 2. Conversion factors: hectare (ha.) = 2.471 acres, 1 metric ton = 2,204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt of rice, and 4.59 480-pound bales of cotton. 3. Includes diversion, acreage reduction, 50-92, & 0-92 programs. 0/92 & 50/92 set-aside includes idled acreage and acreage planted to minor oilseeds, sesame, and crambe. 4. Includes imports. 5. Marketing-year weighted average price received by farmers. Does not include an allowance for loans outstanding and government purchases. 6. Residual included in domestic use. 7. Includes seed. 8. Simple average of 48 percent protein, Decatur. 9. Upland and extra-long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply and use estimates and changes in ending stocks. *Information contacts: Wheat, rice, and feed grains, Jenny Gonzales (202) 694-5296; soybeans, soybean products, and cotton, Mae Dean Johnson (202) 694-5299*

Table 18—Cash Prices, Selected U.S. Commodities

	Marketing year ¹			2000						2001
	1997/98	1998/99	1999/2000	Jan	Aug	Sep	Oct	Nov	Dec	Jan
Wheat, no. 1 HRW, Kansas City (\$/bu.) ²	3.71	3.08	2.87	2.90	2.89	3.13	3.41	3.45	3.47	3.54
Wheat, DNS, Minneapolis (\$/bu.) ³	4.31	3.83	3.65	3.37	3.29	3.17	3.69	3.77	3.52	3.79
Rice, S.W. La. (\$/cwt) ⁴	18.92	16.79	12.99	13.00	11.69	11.88	12.45	12.69	12.75	12.75
Corn, no. 2 yellow, 30-day, Chicago (\$/bu.)	2.56	2.06	1.97	2.05	1.61	1.67	1.91	2.06	2.06	2.03
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	4.11	3.29	3.10	3.20	2.76	2.67	3.14	3.41	3.66	3.64
Barley, feed, Duluth (\$/bu.)	1.90	--	--	--	--	--	1.30	1.42	1.50	1.54
Barley, malting Minneapolis (\$/bu.)	2.50	--	--	--	--	--	2.24	2.39	2.45	--
U.S. cotton price, SLM, 1-1/16 in. (¢/lb.) ⁵	67.79	60.12	60.20	51.92	59.33	60.62	60.54	62.16	61.04	56.66
Northern Europe prices cotton index (¢/lb.) ⁶	72.11	58.97	52.85	47.80	60.93	61.55	60.90	64.07	65.90	64.19
U.S. M 1-3/32 in. (¢/lb.) ⁷	77.98	74.08	59.64	58.69	67.95	67.38	66.69	68.95	69.44	69.75
Soybeans, no. 1 yellow, 15-day ⁸ Central Illinois (\$/bu)	6.51	4.85	4.76	4.73	4.48	4.67	4.51	4.66	4.92	4.63
Soybean oil, crude, Decatur (¢/lb.)	25.84	19.90	20.50	15.56	16.74	16.74	13.50	13.50	13.50	12.53
Soybean meal, 48% protein, Decatur (\$/ton)	185.54	138.50	165.45	160.83	162.64	181.13	176.73	183.83	196.47	187.99

-- = Not available. 1. Beginning June 1 for wheat and barley; Aug. 1 for rice and cotton; Sept. 1 for corn, sorghum, and soybeans; Oct. 1 for soybean meal and oil. 2. Ordinary protein. 3. 14 percent protein. 4. Long grain, milled basis. 5. Average spot market. 6. Liverpool Cotlook "A" Index; average of 5 lowest prices of 13 selected growths. 7. Cotton, Memphis territory growths. 8. Soybean 30-day price discontinued.

Information contact: Mae Dean Johnson (202) 694-5299

Table 19—Farm Programs, Price Supports, Participation, & Payment Rates

	Marketing assistance loan rate	Marketing loan benefit ¹	Flexibility contract payment rate	Acres under contract	Contract payment yields	Partici- pation rate ²
		<i>\$/bu.</i>		<i>Mil. acres</i>	<i>Bu./acre</i>	<i>Percent</i>
Wheat						
1996/97	2.58	--	0.874	76.7	34.70	99
1997/98	2.58	0.01	0.631	76.7	34.70	--
1998/99	2.58	0.19	0.663	78.9	34.50	--
1999/2000	2.58	0.41	0.637	79.0	34.50	--
2000/2001 ³	2.58	--	0.588	78.9	34.50	--
		<i>\$/cwt</i>			<i>Cwt/acre</i>	
Rice						
1996/97	6.50	--	2.766	4.2	48.27	99
1997/98	6.50	0.00	2.710	4.2	48.17	--
1998/99	6.50	0.08	2.921	4.2	48.17	--
1999/2000	6.50	1.94	2.820	4.2	48.15	--
2000/2001 ³	6.50	--	2.600	4.1	48.15	--
		<i>\$/bu.</i>			<i>Bu./acre</i>	
Corn						
1996/97	1.89	--	0.251	80.7	102.90	98
1997/98	1.89	0.01	0.486	80.9	102.80	--
1998/99	1.89	0.14	0.377	82.0	102.60	--
1999/2000	1.89	0.26	0.363	81.9	102.60	--
2000/2001 ³	1.89	--	0.334	81.9	102.60	--
		<i>\$/bu.</i>			<i>Bu./acre</i>	
Sorghum						
1996/97	1.81	--	0.323	13.1	57.30	99
1997/98	1.76	0.00	0.544	13.1	57.30	--
1998/99	1.74	0.12	0.452	13.6	56.90	--
1999/2000	1.74	0.26	0.435	13.7	56.90	--
2000/2001 ³	1.71	--	0.400	13.6	57.00	--
		<i>\$/bu.</i>			<i>Bu./acre</i>	
Barley						
1996/97	1.55	--	0.332	10.5	47.30	99
1997/98	1.57	0.01	0.277	10.5	47.20	--
1998/99	1.56	0.23	0.284	11.2	46.70	--
1999/2000	1.59	0.14	0.271	11.2	46.60	--
2000/2001 ³	1.62	--	0.251	11.2	46.60	--
		<i>\$/bu.</i>			<i>Bu./acre</i>	
Oats						
1996/97	1.03	--	0.033	6.2	50.80	97
1997/98	1.11	0.00	0.031	6.2	50.80	--
1998/99	1.11	0.18	0.031	6.5	50.70	--
1999/2000	1.13	0.19	0.030	6.5	50.60	--
2000/2001 ³	1.16	--	0.028	6.5	50.60	--
		<i>\$/bu.</i>			<i>Bu./acre</i>	
Soybeans ⁴						
1996/97	4.97	--	--	--	--	--
1997/98	5.26	0.01	--	--	--	--
1998/99	5.26	0.45	--	--	--	--
1999/2000	5.26	0.88	--	--	--	--
2000/2001 ³	5.26	--	--	--	--	--
		<i>¢/lb.</i>			<i>Lb./acre</i>	
Upland cotton						
1996/97	51.92	--	8.882	16.2	610.00	99
1997/98	51.92	0.00	7.625	16.2	608.00	--
1998/99	51.92	0.09	8.173	16.4	604.00	--
1999/2000	51.92	0.20	7.880	16.4	604.00	--
2000/2001 ³	51.92	--	7.330	16.3	604.00	--

-- = Not available. 1. Weighted average, based on portions of crop receiving marketing loan gains, loan deficiency payments, and no benefits (calculated by the Economic Research Service). 2. Participation rate is the percent of eligible acres that entered production flexibility contracts. 3. Estimated payment rates and rates and acres under contract. 4. There are no flexibility contract payments for soybeans.

Information contact: Brenda Chewning, Farm Service Agency (202) 720-8838

Table 20—Fruit

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Citrus ¹										
Production (1,000 tons)	11,285	12,452	15,274	14,561	15,799	15,712	17,271	17,770	13,633	17,403
Per capita consumpt. (lb.) ²	19.1	24.4	26.0	25.0	24.1	25.0	27.0	27.1	20.7	--
Noncitrus ³										
Production (1,000 tons)	15,740	17,124	16,554	17,339	16,348	16,103	18,363	16,560	17,331	18,217
Per capita consumpt. (lb.) ²	70.5	73.7	73.8	75.6	73.6	73.9	73.1	76.4	81.3	--
	2000					2001				
	Feb	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Grower prices										
Apples (¢/pound) ⁴	21.1	16.3	16.2	19.5	23.3	21.8	18.5	18.1	16.1	15.2
Pears (¢/pound) ⁴	20.10	11.20	11.50	12.70	16.60	18.10	16.15	15.05	17.00	12.55
Oranges (\$/box) ⁵	3.43	4.70	3.35	2.17	0.93	1.09	3.16	2.94	2.82	3.29
Grapefruit (\$/box) ⁵	4.31	2.73	6.02	4.45	6.71	5.17	3.09	2.20	1.87	2.07
Stocks, ending										
Fresh apples (mil. lb.)	3,231	832	412	129	3,299	6,348	5,633	5,003	4,102	3,373
Fresh pears (mil. lb.)	191	28	40	147	532	426	426	339	250	181
Frozen fruits (mil. lb.)	1,244	1,120	1,300	1,303	1,234	1,626	1,602	1,569	1,471	1,373
Frozen conc. orange juice (mil. single-strength gallons)	776	832	752	595	550	477	491	564	657	743

-- = Not available. 1. Year shown is when harvest concluded. 2. Fresh per capita consumption. 3. Calendar year. 4. Fresh use. 5. U.S. equivalent on-tree returns. Information contact: Susan Pollack (202) 694-5251

Table 21—Vegetables

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Production ¹										
Total vegetables (1,000 cwt)	565,754	689,070	688,824	782,505	747,988	762,952	751,739	729,537	831,976	796,011
Fresh (1,000 cwt) ^{2,4}	242,733	389,597	387,330	412,880	393,398	409,317	427,183	416,746	448,037	452,228
Processed (tons) ^{3,4}	16,151,030	14,973,630	15,074,707	18,481,238	17,729,497	17,681,732	16,227,819	15,639,548	19,196,942	17,189,152
Mushrooms (1,000 lbs) ⁵	746,832	776,357	750,799	782,340	777,870	776,677	808,678	847,760	854,394	--
Potatoes (1,000 cwt)	417,622	425,367	430,349	469,425	445,099	499,254	467,091	475,771	478,216	515,964
Sweet potatoes (1,000 cwt)	11,203	12,005	11,027	13,380	12,821	13,216	13,327	12,382	12,234	13,613
Dry edible beans (1,000 cwt)	33,765	22,615	21,862	28,950	30,689	27,912	29,370	30,418	33,085	26,440
	2000					2001				
	Feb	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Shipments (1,000 cwt)										
Fresh	25,730	37,167	19,317	21,877	15,097	16,561	22,509	18,685	14,775	23,799
Iceberg lettuce	3,776	4,380	3,228	3,930	3,072	3,216	3,710	2,918	2,168	3,517
Tomatoes, all	4,463	4,272	2,497	3,095	2,473	2,684	3,643	3,417	2,602	4,892
Dry-bulb onions	3,910	3,809	3,140	4,314	3,858	3,606	4,150	2,990	2,628	3,774
Others ⁶	13,581	24,706	10,452	10,538	5,694	7,055	11,006	9,360	7,377	11,616
Potatoes, all	17,170	15,085	9,854	12,563	11,272	10,919	15,606	12,549	10,001	15,572
Sweet potatoes	349	228	145	187	272	325	847	405	183	327

-- = Not available. 1. Calendar year except mushrooms. 2. Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes through 1991. 3. Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, and cauliflower. 4. Data after 1991 not comparable to previous years because commodity estimates reinstated in 1992 are included. 5. Fresh and processing agaricus mushrooms only. Excludes specialty varieties. Crop year July 1- June 30. 6. Includes snap beans, broccoli, cabbage, cauliflower, celery, sweet corn, cucumbers, eggplant, bell peppers, honeydews, and watermelons.

Information contact: Gary Lucier (202) 694-5253

Table 22—Other Commodities

	Annual			1999			2000			
	1998	1999	2000	II	III	IV	I	II	III	IV
Sugar										
Production ¹	7,891	9,083	8,912	1,031	749	4,667	2,681	922	772	4,537
Deliveries ¹	9,851	10,167	10,091	2,594	2,693	2,609	2,348	2,513	2,641	2,589
Stocks, ending ¹	3,423	3,855	4,338	3,184	1,639	3,855	4,551	3,498	2,219	4,338
Coffee										
Composite green price ²										
N.Y. (¢/lb.)	114.43	88.49	71.94	90.41	77.40	91.79	85.66	75.78	66.73	59.63
	Annual			1999			2000			
	1997	1998	1999	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Tobacco										
Avg. price to grower ³										
Flue-cured (\$/lb.)	1.73	1.76	1.74	1.82	1.80	--	--	--	--	--
Burley (\$/lb.)	1.91	1.90	1.90	--	1.90	1.91	1.90	1.88	1.77	--
Domestic taxable removals										
Cigarettes (bil.)	471.4	457.9	432.6	38.8	37.6	34.0	28.8	32.5	38.8	28.6
Large cigars (mil.) ⁴	3,552	3,721	3,844	315.6	334.7	320.0	250.7	285.5	333.9	314.0

-- = Not available. 1. 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2. Net imports of green and processed coffee. 3. Crop year July-June for flue-cured, October-September for burley. 4. Includes imports of large cigars. Information contacts: sugar and coffee, Fannye Jolly (202) 694-5249; tobacco, Tom Capehart (202) 694-5245

World Agriculture

Table 23—World Supply & Utilization of Major Crops, Livestock & Products

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00 E	2000/01 F
<i>Million units</i>										
Wheat										
Area (hectares)	222.5	222.9	222.0	214.5	219.2	230.4	227.8	224.7	216.9	215.9
Production (metric tons)	542.9	562.4	558.7	524.1	538.5	581.9	609.2	588.8	587.7	580.4
Exports (metric tons) ¹	111.2	113.0	101.6	101.4	99.5	103.8	104.0	102.0	112.5	106.6
Consumption (metric tons) ²	555.5	550.3	561.6	547.5	548.8	576.9	583.9	590.3	599.1	597.2
Ending stocks (metric tons) ³	132.5	144.5	141.6	118.2	107.9	113.4	138.7	137.2	125.8	108.9
Coarse grains										
Area (hectares)	322.8	326.0	318.7	324.1	313.8	322.8	311.2	307.8	302.4	299.3
Production (metric tons)	810.7	871.8	798.9	871.2	802.8	908.5	883.9	890.1	876.7	856.3
Exports (metric tons) ¹	95.9	92.8	85.8	98.0	87.8	94.1	85.6	96.2	104.2	101.0
Consumption (metric tons) ²	810.1	843.3	838.7	858.5	839.2	873.1	873.0	867.7	881.2	878.4
Ending stocks (metric tons) ³	135.8	164.1	124.3	137.0	100.6	136.2	147.1	169.5	165.0	142.9
Rice, milled										
Area (hectares)	147.5	146.4	144.9	147.4	148.1	149.8	151.2	152.4	154.7	151.9
Production (metric tons)	354.7	355.7	355.4	364.5	371.4	380.3	386.8	394.1	407.8	399.3
Exports (metric tons) ¹	14.2	14.9	16.5	21.0	19.7	18.9	27.7	24.9	22.9	22.7
Consumption (metric tons) ²	355.8	357.5	357.9	366.5	371.5	379.8	382.9	389.9	403.0	403.6
Ending stocks (metric tons) ³	58.1	56.3	53.8	51.8	51.7	52.2	56.1	60.3	65.0	60.7
Total grains										
Area (hectares)	692.8	695.3	685.6	686.0	681.1	703.0	690.2	684.9	674.0	667.1
Production (metric tons)	1,708.3	1,789.9	1,713.0	1,759.8	1,712.7	1,870.7	1,879.9	1,873.0	1,872.2	1,836.0
Exports (metric tons) ¹	221.3	220.7	203.9	220.4	207.0	216.8	217.3	223.1	239.6	230.3
Consumption (metric tons) ²	1,721.4	1,751.1	1,758.2	1,772.5	1,759.5	1,829.8	1,839.8	1,847.9	1,883.3	1,879.2
Ending stocks (metric tons) ³	326.4	364.9	319.7	307.0	260.2	301.8	341.9	367.0	355.8	312.5
Oilseeds										
Crush (metric tons)	185.1	184.4	190.1	208.1	217.5	216.6	226.4	240.6	247.8	251.8
Production (metric tons)	224.3	227.5	229.4	261.9	258.9	261.4	286.5	294.6	302.3	306.1
Exports (metric tons)	37.6	38.2	38.7	44.1	44.3	49.6	54.0	54.7	64.0	64.6
Ending stocks (metric tons)	21.9	23.6	20.3	27.2	22.2	19.0	28.5	31.9	33.6	32.3
Meals										
Production (metric tons)	125.2	125.2	131.7	142.1	147.3	147.7	153.8	164.5	169.4	173.8
Exports (metric tons)	42.2	40.8	44.9	46.7	49.8	50.7	51.9	53.8	55.0	55.6
Oils										
Production (metric tons)	60.6	61.1	63.7	69.6	73.1	73.7	75.1	80.5	85.0	87.3
Exports (metric tons)	21.3	21.3	24.3	27.1	26.0	28.2	29.8	31.6	33.0	33.8
Cotton										
Area (hectares)	34.8	32.6	30.7	32.2	35.9	33.8	33.7	33.0	32.3	31.9
Production (bales)	95.8	82.5	77.1	86.0	93.1	89.6	91.6	84.9	87.2	88.2
Exports (bales)	28.5	25.5	26.8	28.4	27.8	26.9	26.8	23.8	27.2	26.4
Consumption (bales)	86.1	85.9	85.4	84.7	86.0	88.1	87.1	85.3	91.9	91.8
Ending stocks (bales)	37.4	34.7	26.8	29.8	36.6	40.0	43.6	44.8	41.0	37.7
	1992	1993	1994	1995	1996	1997	1998	1999	2000 E	2001 F
Beef and Pork⁴										
Production (metric tons)	111.6	111.6	116.7	122.1	116.6	122.1	127.1	130.2	132.1	134.0
Consumption (metric tons)	109.9	110.6	115.7	120.7	114.1	119.7	124.6	128.4	130.0	132.3
Exports (metric tons) ¹	6.6	6.6	7.2	7.4	7.7	8.2	8.0	9.1	8.8	8.9
Poultry⁴										
Production (metric tons)	38.0	40.5	43.2	47.5	50.4	52.7	53.5	56.5	58.0	59.6
Consumption (metric tons)	37.0	39.4	42.0	47.0	49.6	51.8	52.6	55.8	57.4	59.0
Exports (metric tons) ¹	2.4	2.8	3.6	4.5	5.1	5.6	5.7	6.1	6.3	6.5
Dairy										
Milk production (metric tons) ⁵	--	--	--	--	364.3	365.6	368.0	371.6	375.7	378.8

-- = Not available. E = Estimated, F = forecast. 1. Excludes intra-EU trade but includes intra-FSU trade. 2. Where stocks data are not available, consumption includes stock changes. 3. Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries.

4. Calendar year, selected countries. 5. Data prior to 1989 no longer comparable.

Information contacts: Crops, Ed Allen (202) 694-5288; red meat and poultry, Leland Southard (202) 694-5187; dairy, LaVerne Williams (202) 694-5190

U.S. Agricultural Trade

Table 24—Prices of Principal U.S. Agricultural Trade Products

	Annual			2000						2001
	1997	1998	1999	Jan	Aug	Sep	Oct	Nov	Dec	Jan
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	4.35	3.44	3.04	2.89	3.05	3.31	3.56	3.52	3.55	3.67
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	2.98	2.59	2.30	2.36	1.91	2.05	2.16	2.26	2.43	2.41
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	2.89	2.54	2.15	2.23	1.87	2.01	2.22	2.44	2.50	2.57
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	7.94	6.37	5.02	5.21	4.93	5.19	4.94	5.06	5.42	5.22
Soybean oil, Decatur (¢/lb.)	23.33	25.78	17.51	15.56	14.34	14.24	13.51	13.37	13.12	12.54
Soybean meal, Decatur (\$/ton)	266.70	162.74	141.52	163.41	157.48	174.60	171.52	179.95	195.65	183.17
Cotton, 7-market avg. spot (¢/lb.)	69.62	67.04	52.30	51.92	59.33	60.62	60.52	62.16	61.04	56.66
Tobacco, avg. price at auction (¢/lb.)	182.74	179.77	177.82	191.02	169.51	182.97	181.01	117.45	197.00	205.05
Rice, f.o.b., mill, Houston (\$/cwt)	20.88	18.95	16.99	15.55	14.50	14.56	14.95	15.00	15.00	15.00
Inedible tallow, Chicago (¢/lb.)	20.75	17.67	12.99	11.94	9.00	9.35	10.00	11.00	11.88	12.00
Import commodities										
Coffee, N.Y. spot (\$/lb.)	2.05	1.39	1.05	1.19	0.80	0.82	0.81	0.72	0.67	0.65
Rubber, N.Y. spot (¢/lb.)	55.40	40.57	36.66	38.16	37.82	37.35	37.60	37.04	36.92	35.98
Cocoa beans, N.Y. (\$/lb.)	0.69	0.72	0.47	0.38	0.35	0.36	0.36	0.33	0.33	0.42

Information contact: Mae Dean Johnson (202) 694-5299.

Table 25—Trade Balance

	Fiscal Year			2000						2001
	1999	2000	2001 P	Jan	Aug	Sep	Oct	Nov	Dec	Jan
\$ million										
Exports										
Agricultural	49,148	50,908	53,000	4,162	4,259	4,085	4,987	4,764	4,613	4,373
Nonagricultural	586,606	647,387	--	48,062	57,735	56,330	59,241	56,978	55,898	52,345
Total ¹	635,754	698,295	--	52,224	61,994	60,415	64,228	61,742	60,511	56,718
Imports										
Agricultural	37,310	38,923	40,000	3,175	3,166	2,922	3,217	3,251	3,207	3,407
Nonagricultural	938,948	1,132,257	--	83,231	103,988	102,722	108,266	102,437	95,193	97,096
Total ²	976,258	1,171,180	--	86,405	107,154	105,644	111,483	105,688	98,400	100,503
Trade balance										
Agricultural	11,838	11,985	13,000	987	1,093	1,163	1,770	1,513	1,406	966
Nonagricultural	-352,342	-484,870	--	-35,169	-46,253	-46,392	-49,025	-45,459	-39,295	-44,751
Total	-340,504	-472,885	--	-34,182	-45,160	-45,229	-47,255	-43,946	-37,889	-43,785

P = Projected. -- = Not available. Fiscal year (Oct. 1-Sep. 30). 1. Domestic exports including Department of Defense shipments (f.a.s. value).

2. Imports for consumption (customs value). Information contact: Mary Fant (202) 694-5272

Table 26—Indexes of Real Trade-Weighted Dollar Exchange Rates¹

	Annual			2000						2001
	1998	1999	2000	Jan	Aug	Sep	Oct	Nov	Dec	Jan
	1995 = 100									
Total U.S. Trade	114.0	114.2	119.0	113.8	118.2	120.3	122.4	122.7	121.3	119.3
U.S. markets										
All agricultural trade	119.2	117.5	120.2	115.2	119.0	120.8	122.9	123.7	123.6	121.5
Bulk commodities	118.3	116.6	121.2	115.7	119.8	121.5	123.8	124.9	125.2	122.6
Corn	122.1	116.3	119.2	114.5	117.0	118.2	120.0	121.9	123.4	119.7
Cotton	113.6	112.4	118.3	113.3	116.7	118.5	121.0	122.0	122.3	119.4
Rice	111.5	112.5	117.8	112.5	117.2	119.1	120.8	120.7	119.3	116.2
Soybeans	121.8	119.4	127.3	120.0	126.6	129.2	131.8	132.5	132.2	130.0
Tobacco, raw	108.1	112.8	134.3	126.2	135.4	138.3	141.0	141.5	139.2	137.7
Wheat	125.6	124.6	120.2	114.2	117.9	119.2	121.8	122.7	122.5	118.3
High-value products	119.9	118.3	119.4	114.8	118.3	120.3	122.1	122.8	122.4	120.6
Processed intermediates	115.9	115.1	120.2	114.4	119.2	121.2	123.3	123.9	123.1	119.1
Soymeal	106.6	107.2	117.0	107.5	112.0	113.9	116.2	115.4	113.8	98.3
Soyoil	89.1	98.1	105.2	102.2	105.6	106.4	107.5	107.2	106.3	106.1
Produce and horticulture	118.4	117.3	122.0	116.7	121.7	124.1	126.1	126.7	125.3	124.5
Fruits	120.4	116.8	119.2	115.1	118.4	120.4	122.3	123.1	123.0	122.2
Vegetables	115.9	113.6	114.4	111.3	113.4	115.8	117.3	117.9	116.4	116.3
High-value processed	123.9	121.4	117.8	114.5	116.5	118.2	119.8	120.6	120.9	120.4
Fruit juices	122.9	120.1	123.4	118.5	122.9	125.2	127.2	128.4	127.8	127.5
Poultry	139.2	155.0	116.9	118.0	115.4	116.1	116.3	115.5	115.1	115.0
Red meats	135.4	124.0	121.7	118.5	120.1	121.9	123.5	125.8	128.4	129.2
U.S. competitors										
All agricultural trade	115.7	122.1	135.5	126.1	137.0	140.8	143.7	143.4	139.8	136.8
Bulk commodities	122.2	130.4	134.0	127.5	134.3	137.4	140.2	140.0	137.2	135.9
Corn	113.1	120.5	134.0	124.8	135.3	138.8	141.4	141.1	139.6	135.8
Cotton	128.1	130.7	133.4	126.6	134.5	137.4	140.0	139.0	135.2	132.8
Rice	118.9	120.5	131.1	122.4	131.8	135.0	139.6	139.4	135.8	133.5
Soybeans	106.4	132.1	134.6	131.5	133.5	135.4	137.1	139.3	138.9	137.9
Tobacco, raw	115.3	127.3	121.8	121.3	123.3	125.0	126.6	125.3	121.6	119.3
Wheat	115.6	118.5	129.8	120.4	130.7	134.9	138.2	137.7	133.7	131.9
High-value products	118.4	125.2	139.1	129.0	140.6	144.8	147.9	147.3	143.6	140.1
Processed intermediates	119.9	127.1	138.2	129.2	139.2	143.0	146.1	145.7	142.5	139.8
Soymeal	107.8	132.0	136.9	132.2	136.4	138.9	141.1	143.1	142.3	140.3
Soyoil	107.1	123.3	130.0	124.6	130.7	132.4	134.3	135.8	134.1	134.3
Produce and horticulture	114.2	120.0	133.3	125.1	134.5	138.2	140.8	139.9	137.0	135.0
Fruits	121.0	123.5	135.9	127.3	136.6	140.1	143.5	143.0	139.5	136.4
Vegetables	102.4	109.2	121.7	114.0	122.9	126.1	128.1	127.6	125.3	125.5
High-value processed	118.7	125.7	141.3	130.0	143.2	147.9	151.1	150.6	146.2	141.9
Fruit juices	116.6	122.1	137.0	126.9	138.3	142.4	145.8	144.7	140.4	137.0
Poultry	109.5	121.6	134.9	125.7	136.3	139.6	142.6	142.8	139.8	136.9
Red meats	116.3	122.3	137.8	126.6	139.7	144.5	147.8	147.5	142.6	139.6
U.S. suppliers										
All agricultural trade	111.4	113.5	120.0	115.1	119.8	122.6	124.9	124.1	122.1	120.6
High-value products	108.8	111.6	118.2	113.3	118.2	121.1	123.4	122.4	120.3	118.9
Processed intermediates	112.3	114.8	121.4	115.8	121.4	124.6	127.3	126.6	123.9	122.9
Grains and feeds	112.5	113.0	117.9	112.8	117.6	120.6	122.7	122.8	119.6	118.5
Vegetable oils	123.1	120.9	130.1	122.2	130.5	133.9	138.2	136.8	134.1	132.0
Produce and horticulture	98.4	101.1	103.7	103.4	102.9	104.4	105.5	103.7	103.8	102.9
Fruits	96.5	97.2	98.0	96.2	98.2	99.9	101.4	97.6	99.6	98.3
Vegetables	88.7	84.1	81.3	81.5	79.7	81.2	82.6	80.8	80.8	81.0
High-value processed	111.8	114.9	123.7	116.7	124.0	127.6	130.2	129.6	126.5	124.7
Cocoa and products	120.3	126.1	137.6	132.3	136.9	140.1	143.2	142.9	139.4	137.3
Coffee and products	101.6	111.6	116.4	114.9	114.9	116.5	117.5	117.2	116.5	112.5
Dairy products	117.2	122.5	137.9	126.9	140.7	145.9	148.7	147.8	141.1	138.3
Fruit juices	109.2	122.3	127.8	122.8	127.7	130.4	133.4	132.6	131.2	129.6
Meats	102.1	105.6	115.4	107.6	109.7	110.0	111.3	113.3	114.0	96.9

Real indexes adjust nominal exchange rates for relative rates of inflation among countries. A higher value means the dollar has appreciated.

The weights used for "total U.S. trade" index are based on U.S. total merchandise exports to the largest 85 trading partners. Weights are based on relative importance of major U.S. customers, competitors in world markets, and suppliers to the U.S. Indexes are subject to revision for up to 1 year due to delayed reporting by some countries. High-value products are total agricultural products minus bulk commodities.

Source: Nominal exchange rates are obtained from the IMF International Financial Statistics. Exchange rates for the EU-11 are obtained from the Board of Governors of the Federal Reserve System. Full historical series are available back to January 1970 at

<http://usda.mannlib.cornell.edu/data-sets/international/88021/>

1. A major revision to the weighting scheme and commodity definitions was completed in May 2000. This significantly altered the series from previous versions.

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Table 27—U.S. Agricultural Exports & Imports

	Fiscal Year			Jan		Fiscal Year			Jan	
	1999	2000	2001 F	2000	2001	1999	2000	2001 F	2000	2001
	1,000 units					\$ million				
Exports										
Animals, live	--	--	--	--	--	476	608	--	61	47
Meats and preps., excl. poultry (mt) ¹	2,089	2,457	1,800	187	221	4,500	5,454	5,000	426	438
Dairy products	--	--	--	--	--	914	996	1,000	64	85
Poultry meats (mt)	2,402	2,845	2,900	249	291	1,750	1,961	2,000	155	178
Fats, oils, and greases (mt)	1,387	1,206	1,200	74	79	544	421	--	29	25
Hides and skins, incl. furskins	--	--	--	--	--	1,108	1,479	1,500	108	143
Cattle hides, whole (no.)	17,845	21,837	--	1,630	1,675	844	1,166	--	87	103
Mink pelts (no.)	4,172	4,352	--	248	357	98	111	--	5	7
Grains and feeds (mt) ²	104,576	104,009	--	8,078	7,279	14,272	13,788	14,500	1,094	1,103
Wheat (mt) ³	28,806	27,779	28,700	1,953	1,644	3,648	3,378	3,800	235	220
Wheat flour (mt)	958	825	800	58	44	177	132	--	9	8
Rice (mt)	3,076	3,299	3,100	348	396	1,010	903	800	101	100
Feed grains, incl. products (mt) ⁴	58,398	57,195	58,000	4,737	4,097	5,821	5,483	5,500	461	424
Feeds and fodders (mt)	11,800	13,386	14,100	893	968	2,252	2,496	2,700	187	230
Other grain products (mt)	1,538	1,525	--	90	130	1,363	1,397	--	102	122
Fruits, nuts, and preps. (mt)	3,439	3,736	--	297	308	3,805	3,871	4,800	274	267
Fruit juices, incl.										
froz. (1,000 hectoliters)	12,317	11,902	--	788	817	735	716	--	48	55
Vegetables and preps.	--	0	--	--	--	4,245	4,443	3,100	336	364
Tobacco, unmanufactured (mt)	205	180	200	17	18	1,376	1,229	1,200	115	115
Cotton, excl. linters (mt) ⁵	884	1,474	1,600	143	123	1,309	1,809	2,200	167	171
Seeds (mt)	579	730	--	58	65	800	787	800	96	80
Sugar, cane or beet (mt)	158	115	--	9	7	56	40	--	3	3
Oilseeds and products (mt)	33,597	36,055	35,900	3,782	3,968	8,638	8,386	8,400	843	906
Oilseeds (mt)	--	27,055	--	--	3,012	--	5,782	--	--	636
Soybeans (mt)	22,974	26,038	26,100	2,830	2,874	4,748	5,070	5,000	535	573
Protein meal (mt)	6,726	6,870	--	697	765	1,101	1,259	--	123	169
Vegetable oils (mt)	2,669	2,130	--	194	191	1,846	1,346	--	124	101
Essential oils (mt)	47	53	--	4	4	507	593	--	37	52
Other	--	--	--	--	--	4,112	4,330	--	306	341
Total	--	--	--	--	--	49,148	50,911	53,000	4,162	4,373
Imports										
Animals, live	--	--	--	--	0	1,411	1,737	2,000	106	177
Meats and preps., excl. poultry (mt)	1,403	1,555	1,600	126	148	3,108	3,724	3,900	284	356
Beef and veal (mt)	943	1,027	--	84	103	2,047	2,405	--	187	245
Pork (mt)	337	402	--	32	32	721	958	--	70	79
Dairy products	--	0	--	--	0	1,572	1,635	1,700	125	132
Poultry and products	--	0	--	--	10	201	288	--	18	20
Fats, oils, and greases (mt)	85	107	--	8	0	56	71	--	6	6
Hides and skins, incl. furskins (mt)	--	0	--	--	3	146	160	--	23	27
Wool, unmanufactured (mt)	29	25	--	3	0	75	66	--	8	7
Grains and feeds	--	--	--	--	--	2,943	3,058	3,200	227	262
Fruits, nuts, and preps., excl. juices (mt) ⁶	8,171	8,366	8,300	752	781	4,619	4,546	5,600	426	457
Bananas and plantains (mt)	4,418	4,396	4,300	373	349	1,212	1,128	1,100	93	94
Fruit juices (1,000 hectoliters)	31,655	32,199	30,000	2,819	2,302	772	783	--	69	52
Vegetables and preps.	--	--	--	--	0	4,527	4,657	4,900	453	525
Tobacco, unmanufactured (mt)	217	220	200	15	21	742	651	600	47	73
Cotton, unmanufactured (mt)	144	34	--	2	5	150	28	--	3	2
Seeds (mt)	357	448	--	55	19	457	493	--	36	30
Nursery stock and cut flowers	--	--	--	--	0	1,076	1,165	1,200	103	101
Sugar, cane or beet (mt)	1,692	1,379	--	46	127	606	493	--	14	51
Oilseeds and products (mt)	3,767	4,069	4,300	300	339	1,899	1,873	1,800	146	146
Oilseeds (mt)	1,000	1,103	--	54	40	326	310	--	22	18
Protein meal (mt)	1,131	1,194	--	110	122	147	150	--	13	17
Vegetable oils (mt)	1,637	1,772	--	136	177	1,427	1,413	--	111	112
Beverages, excl. fruit										
juices (1,000 hectoliters)	--	--	--	--	0	4,258	4,702	--	287	349
Coffee, tea, cocoa, spices (mt)	2,520	2,841	--	269	244	5,306	5,218	--	501	356
Coffee, incl. products (mt)	1,294	1,411	1,300	132	105	2,967	2,905	2,800	292	153
Cocoa beans and products (mt)	865	1,046	1,000	111	108	1,531	1,466	1,400	141	133
Rubber and allied gums (mt)	1,148	1,249	1,200	131	90	739	841	900	85	58
Other	--	--	--	--	0	2,646	2,735	--	209	219
Total	--	--	--	--	0	37,310	38,923	40,000	3,175	3,407

F = Forecast. -- = Not available. Projections are fiscal years (Oct. 1 through Sept. 30) and are from Outlook for U.S. Agricultural Exports. 1999 and 2000 data are from *Foreign Agricultural Trade of the U.S.* 1. Projection includes beef, pork, and variety meat. 2. Projection includes pulses. 3. Value projection includes wheat flour. 4. Projection excludes grain products. 5. Projection includes linters. 6. Value projection includes juice.

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Table 28—U.S. Agricultural Exports by Region

	Fiscal year			2000						2001
	1999	2000	2001 F	Jan	Aug	Sep	Oct	Nov	Dec	Jan
	\$ million									
Region & country										
Western Europe	7,528	6,712	6,600	698	470	454	795	650	704	626
European Union ¹	6,958	6,373	6,200	654	425	419	710	591	687	605
Belgium-Luxembourg	602	538	--	48	38	43	53	62	78	65
France	377	347	--	28	26	19	29	27	53	26
Germany	1,057	947	--	89	74	74	97	84	73	91
Italy	574	560	--	77	29	30	44	41	56	37
Netherlands	1,587	1,459	--	150	84	81	155	171	184	163
United Kingdom	1,122	1,033	--	67	79	91	144	101	72	84
Portugal	131	145	--	17	11	5	11	3	22	22
Spain, incl. Canary Islands	784	664	--	106	28	24	87	52	83	55
Other Western Europe	570	340	400	44	45	35	84	60	17	21
Switzerland	455	250	--	38	36	27	75	50	12	15
Eastern Europe	190	167	200	9	17	11	17	18	13	16
Poland	73	47	--	2	6	3	6	8	4	6
Former Yugoslavia	47	67	--	3	4	4	3	5	2	4
Romania	18	12	--	0	3	1	3	1	5	1
Newly Independent States	881	937	800	88	56	72	100	86	61	85
Russia	532	674	600	67	47	41	76	67	43	67
Asia²	20,441	22,051	20,200	1,772	1,814	1,701	1,964	1,978	1,970	1,905
West Asia (Mideast)	1,978	2,363	2,400	170	215	215	254	203	194	156
Turkey	448	701	700	74	42	35	30	59	68	34
Iraq	9	8	--	--	8	--	--	--	--	--
Israel, incl. Gaza and W. Bank	417	458	--	18	43	41	39	47	51	43
Saudi Arabia	468	482	500	33	52	47	46	44	41	40
South Asia	499	416	400	22	29	40	49	33	53	28
Bangladesh	165	82	--	3	5	4	6	4	16	6
India	189	186	--	17	16	24	23	21	20	18
Pakistan	89	93	--	1	3	6	8	6	6	2
China	1,011	1,474	1,800	98	167	88	200	195	167	177
Japan	8,933	9,353	9,200	801	698	679	709	776	775	840
Southeast Asia	2,218	2,602	2,800	200	208	241	270	307	195	274
Indonesia	499	681	800	41	58	64	84	47	50	92
Philippines	735	866	900	65	70	76	78	111	68	85
Other East Asia	5,803	5,844	6,000	481	497	437	482	464	585	430
Korea, Rep.	2,482	2,569	2,700	228	233	200	183	196	276	205
Hong Kong	1,264	1,255	1,300	87	117	103	118	128	123	84
Taiwan	2,047	2,011	2,000	164	146	135	175	139	186	141
Africa	2,160	2,272	2,500	162	246	255	253	175	213	166
North Africa	1,468	1,565	1,700	117	180	189	190	103	149	123
Morocco	162	141	--	9	9	19	30	6	24	7
Algeria	223	255	--	21	36	22	21	23	16	27
Egypt	1,002	1,094	1,000	84	127	140	134	61	80	74
Sub-Saharan	693	707	800	45	66	66	63	72	65	43
Nigeria	176	160	--	16	19	14	17	21	14	14
S. Africa	165	164	--	14	8	17	9	13	7	9
Latin America and Caribbean	10,495	10,639	11,500	800	958	904	989	1,054	985	889
Brazil	366	253	300	23	23	14	18	29	19	17
Caribbean Islands	1,453	1,457	--	103	110	111	130	137	114	105
Central America	1,209	1,129	--	79	109	97	89	113	96	84
Colombia	468	427	--	40	35	22	39	35	30	31
Mexico	5,672	6,329	7,100	447	599	575	634	624	648	574
Peru	347	201	--	31	11	14	8	19	5	9
Venezuela	458	404	400	25	37	37	42	31	30	30
Canada	6,951	7,520	8,100	594	618	623	726	689	607	656
Oceania	502	490	500	40	51	41	49	43	41	31
Total	49,148	50,911	53,000	4,162	4,259	4,085	4,987	4,764	4,613	4,373

F = Forecast. -- = Not available. Based on fiscal year beginning October 1 and ending September 30. 1. Austria, Finland, and Sweden are included in the European Union. 2. Asia forecasts exclude West Asia (Mideast). NOTE: Adjusted for transshipments through Canada for 1998 and 1999 through December 1999, but transshipments are not distributed by country as previously for 2000. Information contact: Marv Fant (202) 694-5272

Farm Income

Table 29—Value Added to the U.S. Economy by the Agricultural Sector

	1992	1993	1994	1995	1996	1997	1998	1999	2000F	2001F
	\$ billion									
Final crop output	88.9	82.4	100.3	95.7	115.6	112.3	102.1	93.1	96.3	101.0
Food grains	8.5	8.2	9.5	10.4	10.8	10.4	8.9	7.3	7.0	7.0
Feed crops	20.1	20.2	20.3	24.5	27.2	27.0	22.7	19.8	20.5	21.7
Cotton	5.2	5.2	6.7	6.9	7.0	6.3	6.1	4.7	5.3	6.2
Oil crops	13.3	13.2	14.7	15.5	16.4	19.8	17.5	13.6	15.0	15.7
Tobacco	3.0	2.9	2.7	2.5	2.8	2.9	2.8	2.3	2.0	2.4
Fruits and tree nuts	10.1	10.3	10.3	11.1	11.9	13.1	12.2	13.0	12.7	12.8
Vegetables	11.8	13.7	14.0	15.0	14.4	14.7	15.1	15.2	16.0	15.9
All other crops	13.7	13.7	14.7	15.0	15.8	16.9	17.1	17.4	18.1	18.4
Home consumption	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Value of inventory adjustment ¹	3.2	-5.3	7.2	-5.3	9.1	1.1	-0.5	-0.2	-0.4	0.6
Final animal output	87.1	92.0	89.7	87.7	92.0	96.5	94.2	95.1	99.2	100.2
Meat animals	47.7	51.0	46.7	44.9	44.2	49.7	43.3	45.6	51.8	50.6
Dairy products	19.7	19.3	20.0	19.9	22.8	20.9	24.1	23.2	20.7	21.7
Poultry and eggs	15.5	17.4	18.5	19.1	22.5	22.3	22.9	22.9	23.3	23.8
Miscellaneous livestock	2.6	2.9	3.1	3.3	3.4	3.6	3.7	3.7	3.7	3.7
Home consumption	0.5	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4
Value of inventory adjustment ¹	1.0	1.1	1.1	0.2	-1.1	-0.4	-0.3	-0.7	-0.6	0.1
Services and forestry	15.2	17.0	18.1	19.9	20.8	22.1	24.7	26.7	27.5	27.6
Machine hire and customwork	1.8	1.9	2.1	1.9	2.2	2.4	2.2	2.0	2.2	2.3
Forest products sold	2.2	2.5	2.6	2.8	2.6	2.8	3.0	2.9	2.9	2.9
Other farm income	4.1	4.6	4.3	5.8	6.2	6.9	8.7	10.8	11.2	10.9
Gross imputed rental value of farm dwellings	7.2	8.1	9.0	9.4	9.9	10.1	10.8	10.9	11.2	11.5
Final agricultural sector output ²	191.3	191.3	208.0	203.4	228.4	230.9	221.0	214.9	223.0	228.9
<i>Minus</i> Intermediate consumption outlays:	93.4	100.7	104.9	109.7	113.2	121.0	118.5	120.8	126.5	127.6
Farm origin	38.6	41.3	41.3	41.8	42.7	46.8	44.8	45.5	47.1	46.2
Feed purchased	20.1	21.4	22.6	23.8	25.2	26.3	25.0	24.5	24.7	24.7
Livestock and poultry purchased	13.6	14.7	13.3	12.5	11.3	13.8	12.5	13.8	15.2	14.4
Seed purchased	4.9	5.2	5.4	5.5	6.2	6.7	7.2	7.2	7.2	7.1
Manufactured inputs	22.7	23.1	24.4	26.1	28.6	29.2	28.2	27.3	30.2	30.9
Fertilizers and lime	8.3	8.4	9.2	10.0	10.9	10.9	10.6	9.9	10.4	10.8
Pesticides	6.5	6.7	7.2	7.7	8.5	9.0	9.0	8.6	8.6	8.8
Petroleum fuel and oils	5.3	5.4	5.3	5.4	6.0	6.2	5.6	5.8	8.1	8.1
Electricity	2.6	2.7	2.7	3.0	3.2	3.0	2.9	3.0	3.0	3.1
Other intermediate expenses	32.1	36.2	39.2	41.7	41.9	44.9	45.6	48.0	49.2	50.6
Repair and maintenance of capital items	8.5	9.2	9.1	9.5	10.3	10.4	10.4	10.5	10.6	10.9
Machine hire and customwork	3.8	4.4	4.8	4.8	4.7	4.9	5.4	5.3	5.5	5.6
Marketing, storage, and transportation	4.5	5.6	6.8	7.2	6.9	7.1	6.9	7.3	7.6	8.0
Contract labor	1.7	1.8	1.8	2.0	2.1	2.6	2.4	2.6	2.7	2.8
Miscellaneous expenses	13.6	15.2	16.7	18.3	17.8	19.9	20.6	22.3	22.8	23.3
<i>Plus</i> Net government transactions:	2.7	6.9	1.1	0.2	0.2	0.2	4.8	13.1	14.5	6.4
+ Direct government payments	9.2	13.4	7.9	7.3	7.3	7.5	12.2	20.6	22.1	14.1
- Motor vehicle registration and licensing fees	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.5
- Property taxes	6.1	6.2	6.4	6.6	6.7	6.8	6.9	7.1	7.1	7.3
Gross value added	100.5	97.5	104.3	93.9	115.4	110.1	107.3	107.2	111.0	107.7
<i>Minus</i> Capital consumption	18.3	18.3	18.7	19.2	19.4	19.6	19.7	19.9	19.8	20.2
Net value added ²	82.2	79.2	85.6	74.7	96.0	90.6	87.5	87.3	91.2	87.5
<i>Minus</i> Factor payments:	34.6	34.8	36.8	37.8	41.1	42.0	42.9	43.9	45.8	46.2
Employee compensation (total hired labor)	12.3	13.2	13.5	14.3	15.2	16.0	16.9	17.5	18.1	18.9
Net rent received by nonoperator landlords	11.2	10.9	11.8	10.9	12.9	12.8	12.7	12.9	13.5	12.6
Real estate and non-real estate interest	11.0	10.7	11.6	12.6	13.0	13.1	13.4	13.6	14.2	14.7
Net farm income ²	47.7	44.3	48.8	36.9	54.9	48.6	44.6	43.4	45.4	41.3

Values in last two columns are preliminary or forecast. 1. A positive value of inventory change represents current-year production not sold by December 31. A negative value is an offset to production from prior years included in current-year sales. 2. Final sector output is the gross value of commodities and services produced within a year. Net value added is the sector's contribution to the National economy and is the sum of income from production earned by all factors of production. Net farm income is farm operators' share of income from the sector's production activities. The concept presented is consistent with that employed by the Organization for Economic Cooperation and Development. *Information contact: Roger Strickland: rogers@ers.usda.gov*

To confirm that this table contains the current forecast, go to <http://www.ers.usda.gov/briefing/farmincome/fore/fore.htm>

Table 30—Farm Income Statistics

	1992	1993	1994	1995	1996	1997	1998	1999	2000F	2001F
<i>\$ billion</i>										
Cash income statement										
1. Cash receipts	171.3	177.9	181.1	188.0	199.1	207.6	196.6	188.6	196.0	200.0
Crops ¹	85.6	87.5	92.9	100.8	106.3	111.1	102.5	93.1	96.6	100.2
Livestock	85.7	90.4	88.2	87.1	92.8	96.5	94.1	95.5	99.5	99.8
2. Direct Government payments	9.2	13.4	7.9	7.3	7.3	7.5	12.2	20.6	22.1	14.1
3. Farm-related income ²	8.0	9.0	9.0	10.5	10.9	12.0	13.9	15.8	16.3	16.1
4. Gross cash income (1+2+3)	188.5	200.3	198.1	205.8	217.4	227.1	222.6	225.0	234.4	230.2
5. Cash expenses ³	133.5	141.2	147.4	153.2	159.8	168.6	167.2	170.4	178.0	179.5
6. Net cash income (4-5)	54.9	59.1	50.7	52.5	57.6	58.5	55.4	54.6	56.4	50.7
Farm income statement										
7. Gross cash income (4)	188.5	200.3	198.1	205.8	217.4	227.1	222.6	225.0	234.4	230.2
8. Noncash income ⁴	7.8	8.7	9.6	9.9	10.3	10.6	11.3	11.4	11.7	12.1
9. Value of inventory adjustment	4.2	-4.2	8.3	-5.0	8.0	0.7	-0.7	-0.9	-1.0	0.7
10. Gross farm income (7+8+9)	200.4	204.7	215.9	210.7	235.7	238.4	233.2	235.5	245.1	243.0
11. Total production expenses	152.8	160.4	167.1	173.8	180.8	189.8	188.6	192.1	199.7	201.7
12. Net farm income (10-11)	47.7	44.3	48.8	36.9	54.9	48.6	44.6	43.4	45.4	41.3

Values for last 2 years are preliminary or forecast. Numbers in parentheses indicate the combination of items required to calculate an item. Totals may not add due to rounding. 1. Includes commodities placed under CCC loans and profits made on loans redeemed. 2. Income from custom labor, machine hire, recreational activities, forest product sales, and other farm sources. 3. Excludes depreciation and perquisites to hired labor. Excludes farm operator dwellings. 4. Value of farm products consumed on farms where produced plus the imputed rental value of farm dwellings.

Information Contact: Roger Strickland: rogers@ers.usda.gov

To confirm that this table contains the current forecast, go to <http://www.ers.usda.gov/briefing/farmincome/fore/fore.htm>

Table 31—Average Income to Farm Operator Households¹

	1992	1993	1994	1995	1996	1997	1998	1999	2000
<i>\$ per farm</i>									
Net cash farm business income ²	11,320	11,248	11,389	11,218	13,502	12,676	14,357	13,194	12,951
Less depreciation ³	5,187	6,219	6,466	6,795	6,906	6,578	7,409	7,027	--
Less wages paid to operator ⁴	216	454	425	522	531	513	637	499	--
Less farmland rental income ⁵	360	534	701	769	672	568	543	802	--
Less adjusted farm business income due to other household(s) ⁶	961	872	815	649	1,094	*1,505	1,332	1,262	--
<i>\$ per farm operator household</i>									
Equals adjusted farm business income	4,596	3,168	2,981	2,484	4,300	3,513	4,436	3,603	--
Plus wages paid to operator	216	454	425	522	531	513	637	499	--
Plus net income from farmland rental ⁷	360	--	--	1,053	1,178	945	868	1,312	--
Equals farm self-employment income	5,172	3,623	3,407	4,059	6,009	4,971	5,941	5,415	--
Plus other farm-related earnings ⁸	2,008	1,192	970	661	1,898	1,234	1,165	944	--
Equals earnings of the operator household from farming activities	7,180	4,815	4,376	4,720	7,906	6,205	7,106	6,359	4,600
Plus earnings of the operator household from off-farm sources ⁹	35,731	35,408	38,092	39,671	42,455	46,358	52,628	57,988	60,058
Equals average farm operator household income	42,911	40,223	42,469	44,392	50,361	52,562	59,734	64,347	64,658
<i>\$ per U.S. household</i>									
U.S. average household income ¹⁰	38,840	41,428	43,133	44,938	47,123	49,692	51,855	54,842	--
<i>Percent</i>									
Average farm operator household income as percent of U.S. average household income	110.5	97.1	98.5	98.8	106.9	105.8	115.2	117.3	--
Average operator household earnings from farming activities as percent of average operator household income	16.7	12.0	10.3	10.6	15.7	11.8	11.9	9.9	--

-- = Not available. Values in last two columns are preliminary or forecast. 1. This table derives farm operator household income estimates from the Agricultural Resource Management Study (ARMS) that are consistent with Current Population Survey (CPS) methodology. The CPS, conducted by the Bureau of the Census, is the source of official U.S. household income statistics. The CPS defines income to include any income received as cash. The CPS definition departs from a strictly cash concept by including depreciation as an expense that farm operators and other self-employed people subtract from gross receipts when reporting net cash income. 2. A component of farm-sector income. Excludes income of contractors and landlords as well as the income of farms organized as nonfamily corporations or cooperatives, and farms run by a hired manager. Includes income of farms organized as proprietorships, partnerships, and family corporations. 3. Consistent with the CPS definition of self-employed income, reported depreciation expenses are subtracted from net cash farm income. The ARMS collects data on farm business depreciation used for tax purposes. 4. Wages paid to the operator are excluded because they are not shared among other households that have claims on farm business income. These wages are added to the operator household's adjusted farm business income to obtain farm self-employment income. 5. Gross rental income is excluded because net rental income from farm operation is added below to income received by the household. 6. More than one household may have a claim on the income of a farm business. On average, 1.1 households share the income of a farm business. 7. Includes net rental income from the farm business. Also includes net rental income from farmland held by household members that is not part of the farm business. In 1992, gross rental income from the farm business was used because net rental income data were not collected. In 1993 and 1994, net rental income data were collected as part of off-farm income. 8. Wages paid to other operator household members by the farm business, and net income from a farm business other than the one surveyed. In 1996, also includes the value of commodities provided to household members for farm work. 9. Wages, salaries, net income from nonfarm businesses, interest, dividends, transfer payments, etc. In 1993 and 1994, also includes net rental income from farmland. 10. From the CPS. Sources: U.S. Department of Agriculture, Economic Research Service, 1992, 1993, 1994, and 1995 Farm Costs and Returns Survey (FCRS), and 1996 and 1997 Agricultural Resource Management Study for farm operator household data. U.S. Department of Commerce, Bureau of the Census Current Population Survey (PCS), for average household income. Information contact: Bob Hoppe (202) 694-5572 or rhoppe@ers.usda.gov

Table 32—Balance Sheet of the U.S. Farming Sector

	1992	1993	1994	1995	1996	1997	1998	1999	2000F	2001F
\$ billion										
Farm assets	868.3	910.2	936.1	967.6	1,004.8	1,053.1	1,085.5	1,116.6	1,121.0	1,132.1
Real estate	640.8	677.6	704.1	740.5	769.5	808.2	841.8	870.0	874.4	883.1
Livestock and poultry ¹	71.0	72.8	67.9	57.8	60.3	67.1	63.4	70.6	69.7	71.0
Machinery and motor vehicles	85.4	86.4	88.1	89.4	89.8	90.1	90.2	89.0	89.3	89.4
Crops stored ^{2,3}	24.2	23.3	23.3	27.4	31.7	32.9	30.1	26.9	28.1	28.0
Purchased inputs	3.9	3.8	5.0	3.4	4.4	5.1	5.3	4.2	4.5	4.6
Financial assets	43.1	46.3	47.6	49.1	49.0	49.7	54.8	55.8	55.0	56.0
Total farm debt	139.1	142.0	146.8	150.8	156.1	165.4	172.9	176.4	180.6	182.8
Real estate debt ³	75.4	76.0	77.7	79.3	81.7	85.4	89.6	94.2	97.3	98.6
Non-real estate debt ⁴	63.6	65.9	69.1	71.5	74.4	80.1	83.2	82.2	83.2	84.2
Total farm equity	729.3	768.2	789.3	816.8	848.7	887.7	912.7	940.2	940.4	949.3
Selected ratios										
Debt to equity	19.1	18.5	18.6	18.5	18.4	18.6	18.9	18.8	19.2	19.3
Debt to assets	16.0	15.6	15.7	15.6	15.5	15.7	15.9	15.8	16.1	16.1

Values in the last two columns are preliminary or forecast. 1. As of December 31. 2. Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3. Includes CCC storage and drying facilities loans, but excludes debt on operator dwellings. 4. Excludes debt for nonfarm purposes. *Information contact: Ken Erickson (202) 694-5565 or erickson@ers.usda.gov*

To confirm that this table contains the current forecast, go to <http://www.ers.usda.gov/briefing/farmincome/fore/fore.htm>

Table 33—Cash Receipts from Farming

	Annual			1999	2000					
	1998	1999	2000	Dec	Jul	Aug	Sep	Oct	Nov	Dec
\$ million										
Commodity sales ¹	196,575	188,610	191,002	17,537	15,276	16,048	17,810	21,995	18,486	14,695
Livestock and products	94,112	95,463	97,987	7,632	8,357	8,721	8,116	8,541	8,854	6,504
Meat animals	43,336	45,600	51,618	3,473	4,114	4,825	4,229	4,469	4,587	2,780
Dairy products	24,114	23,204	20,743	2,001	1,778	1,743	1,753	1,794	1,704	1,673
Poultry and eggs	22,942	22,942	21,908	1,926	1,815	1,880	1,799	2,038	2,042	1,820
Other	3,719	3,717	3,718	232	651	272	334	239	521	232
Crops	102,463	93,146	93,015	9,905	6,919	7,327	9,694	13,455	9,632	8,191
Food grains	8,892	7,292	6,536	493	1,141	706	760	448	337	457
Feed crops	22,666	19,752	19,753	2,269	1,151	1,396	1,859	2,902	1,805	1,849
Cotton (lint and seed)	6,101	4,696	4,230	1,378	81	159	363	1,041	813	921
Tobacco	2,803	2,273	1,764	558	0	314	430	167	195	208
Oil-bearing crops	17,483	13,555	13,798	1,133	656	707	1,425	3,929	1,036	914
Vegetables and melons	15,145	15,164	16,112	800	1,743	1,756	1,965	1,827	1,142	602
Fruits and tree nuts	12,238	12,975	13,459	1,423	1,173	1,335	1,327	1,505	1,949	1,418
Other	17,136	17,441	17,363	1,851	974	953	1,564	1,636	2,355	1,822
Government payments	12,209	20,594	21,559	2,143	395	967	6,272	3,154	--	--
Total	208,784	209,204	212,561	19,680	15,671	17,015	24,082	25,149	20,495	16,557

Annual values for the most recent year are preliminary. 1. Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period. *Information contacts: Larry Traub (202) 694-5593 or ltraub@ers.usda.gov*
 To receive current monthly cash receipts via e-mail contact Larry Traub.

Table 34—Cash Receipts from Farm Marketings, by State

Region and State	Livestock and products				Crops ¹				Total ¹			
	1999	2000	Nov 2000	Dec 2000	1999	2000	Nov 2000	Dec 2000	1999	2000	Nov 2000	Dec 2000
\$ million												
North Atlantic												
Maine	286	269	24	22	229	215	12	15	515	484	35	37
New Hampshire	63	63	5	5	90	92	7	7	153	155	12	13
Vermont	473	432	35	37	68	66	5	4	541	498	40	41
Massachusetts	101	101	8	8	295	283	41	19	396	383	49	28
Rhode Island	8	8	1	1	39	40	3	6	48	48	4	7
Connecticut	180	176	20	15	302	277	17	36	482	454	37	51
New York	2,043	1,868	160	145	1,054	1,167	110	82	3,097	3,035	270	228
New Jersey	187	233	44	12	554	581	40	33	740	814	84	45
Pennsylvania	2,877	2,716	267	212	1,193	1,240	129	121	4,070	3,956	396	333
North Central												
Ohio	1,786	1,794	158	122	2,643	2,634	197	181	4,429	4,428	355	303
Indiana	1,581	1,692	146	135	2,792	2,860	146	233	4,373	4,552	291	367
Illinois	1,524	1,616	133	87	5,233	5,311	222	364	6,757	6,927	355	452
Michigan	1,331	1,319	107	85	2,139	2,163	270	190	3,470	3,482	378	275
Wisconsin	4,149	3,488	319	257	1,447	1,425	178	120	5,596	4,913	496	376
Minnesota	3,548	3,690	317	222	3,513	3,558	413	342	7,061	7,248	731	563
Iowa	4,712	5,912	430	432	5,004	4,979	310	362	9,716	10,892	740	794
Missouri	2,477	2,481	226	158	1,779	1,878	184	187	4,256	4,359	410	345
North Dakota	647	723	44	37	2,112	2,065	287	252	2,759	2,788	330	289
South Dakota	1,830	1,973	186	60	1,709	1,743	162	91	3,539	3,716	348	151
Nebraska	5,425	6,045	538	368	3,130	3,012	298	254	8,555	9,057	835	622
Kansas	5,009	5,577	479	369	2,607	2,538	362	212	7,616	8,115	841	582
Southern												
Delaware	566	557	43	44	153	169	19	8	718	726	62	52
Maryland	937	947	79	79	544	599	70	42	1,481	1,546	149	121
Virginia	1,580	1,620	156	103	704	689	73	59	2,283	2,309	230	162
West Virginia	334	334	28	24	53	53	5	5	387	387	33	30
North Carolina	3,850	4,178	382	332	2,838	2,870	349	298	6,688	7,048	731	630
South Carolina	773	755	70	58	633	653	56	55	1,406	1,408	126	113
Georgia	3,334	3,187	271	238	1,907	1,949	180	192	5,241	5,136	451	429
Florida	1,363	1,216	126	108	5,702	5,465	434	468	7,066	6,682	560	576
Kentucky	2,158	2,233	382	88	1,298	1,025	46	181	3,456	3,258	428	269
Tennessee	1,011	1,078	88	60	963	969	133	96	1,974	2,046	222	156
Alabama	2,777	2,579	213	201	662	578	64	60	3,438	3,157	278	261
Mississippi	2,143	2,053	170	167	1,031	834	102	81	3,174	2,887	272	248
Arkansas	3,397	3,245	271	241	1,863	1,546	177	128	5,259	4,791	448	370
Louisiana	620	651	49	43	1,228	1,121	178	239	1,848	1,772	227	282
Oklahoma	3,135	3,457	349	89	855	782	57	54	3,991	4,239	406	144
Texas	8,480	8,879	801	599	4,572	3,996	444	477	13,052	12,875	1,246	1,076
Western												
Montana	928	1,001	113	25	789	722	88	79	1,716	1,723	200	104
Idaho	1,603	1,563	143	80	1,744	1,935	267	206	3,347	3,498	410	286
Wyoming	680	737	77	20	172	168	50	23	852	905	126	42
Colorado	3,016	3,209	309	235	1,338	1,259	152	137	4,354	4,467	462	372
New Mexico	1,441	1,521	115	61	513	496	61	39	1,953	2,017	175	99
Arizona	987	1,045	111	42	1,191	1,169	134	106	2,178	2,214	245	148
Utah	724	728	64	66	243	246	27	20	967	973	91	86
Nevada	216	216	14	15	118	147	12	10	334	363	26	25
Washington	1,658	1,528	138	127	3,275	3,418	316	281	4,933	4,946	454	408
Oregon	790	842	87	35	2,262	2,253	270	145	3,052	3,095	357	180
California	6,714	6,338	551	525	18,087	19,330	2,434	1,557	24,801	25,668	2,985	2,082
Alaska	29	29	2	2	19	19	1	1	48	48	4	4
Hawaii	86	86	7	7	447	430	39	35	533	517	46	42
U.S.	95,567	97,987	8,854	6,504	93,134	93,015	9,632	8,191	188,701	191,002	18,486	14,695

Annual values for the most recent year are preliminary. Estimates as of end of current month. Totals may not add because of rounding. 1. Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period.

Information contact: Larry Traub (202) 694-5593 or ltraub@ers.usda.gov. To receive current monthly cash receipts via e-mail, contact Larry Traub.

Table 35—CCC Net Outlays by Commodity & Function

Commodity/Program	Fiscal year									
	1992	1993	1994	1995	1996	1997	1998	1999	2000 E	2001 E
	\$ million									
Feed grains:										
Corn	2,105	5,143	625	2,090	2,021	2,587	2,873	5,402	9,696	3,712
Grain sorghum	190	410	130	153	261	284	296	502	942	252
Barley	174	186	202	129	114	109	168	224	393	128
Oats	32	16	5	19	8	8	17	41	63	55
Corn and oat products	9	10	10	1	0	0	0	0	1	0
Total feed grains	2,510	5,765	972	2,392	2,404	2,988	3,354	6,169	11,095	4,147
Wheat and products	1,719	2,185	1,729	803	1,491	1,332	2,187	3,435	5,417	1,688
Rice	715	887	836	814	499	459	491	911	1,729	769
Upland cotton	1,443	2,239	1,539	99	685	561	1,132	1,882	4,206	1,700
Tobacco	29	235	693	-298	-496	-156	376	113	301	25
Dairy	232	253	158	4	-98	67	291	480	685	149
Soybeans	-29	109	-183	77	-65	5	139	1,289	2,725	3,325
Peanuts	41	-13	37	120	100	6	-11	21	42	60
Sugar	-19	-35	-24	-3	-63	-34	-30	-51	141	90
Honey	17	22	0	-9	-14	-2	0	2	1	3
Wool and mohair	191	179	211	108	55	0	0	10	7	-6
Operating expense ¹	6	6	6	6	6	6	5	4	60	5
Interest expenditure	532	129	-17	-1	140	-111	76	210	626	707
Export programs ²	1,459	2,193	1,950	1,361	-422	125	212	165	329	691
1988-2000 Disaster/tree/ livestock assistance	1,054	944	2,566	660	95	130	3	2,241	1,549	26
Conservation Reserve Program	0	0	0	0	2	1,671	1,693	1,462	1,587	1,657
Other conservation programs	0	0	0	0	7	105	197	292	382	355
Other	-162	949	-137	-103	320	104	28	588	1,459	1,004
Total	9,738	16,047	10,336	6,030	4,646	7,256	10,143	19,223	32,341	16,395
Function										
Price support loans (net)	584	2,065	527	-119	-951	110	1,128	1,455	1,947	1,248
Cash direct payments: ³										
Production flexibility contract	0	0	0	0	5,141	6,320	5,672	5,476	5,049	4,057
Market loss assistance	0	0	0	0	0	0	0	3,011	11,054	0
Deficiency	5,491	8,607	4,391	4,008	567	-1,118	-7	-3	0	0
Dairy termination	2	0	0	0	0	0	0	0	0	0
Loan deficiency	214	387	495	29	0	0	478	3,360	6,387	5,259
Oilseed	0	0	0	0	0	0	0	0	463	500
Cotton user marketing	140	114	149	88	34	6	416	280	491	355
Other	0	35	22	9	61	1	0	1	476	520
Conservation Reserve Program	0	0	0	0	2	1,671	1,693	1,435	1,551	1,657
Other conservation programs	0	0	0	0	0	85	156	247	331	302
Noninsured Assistance (NAP)	0	0	0	0	2	52	23	54	75	177
Total direct payments	5,847	9,143	5,057	4,134	5,807	7,017	8,431	13,861	25,877	12,827
1988-99 crop disaster	960	872	2,461	577	14	2	-2	1,913	1,299	0
Emergency livestock/tree/DRAP livestock indemn/forage assist.	94	72	105	83	81	128	5	328	250	26
Purchases (net)	321	525	293	-51	-249	-60	207	668	784	57
Producer storage payments	14	9	12	23	0	0	0	0	0	0
Processing, storage, and transportation	185	136	112	72	51	33	38	62	75	75
Export donations ocean transportation	139	352	156	50	69	34	40	323	617	161
Operating expense ¹	6	6	6	6	6	6	5	4	60	5
Interest expenditure	532	129	-17	-1	140	-111	76	210	626	707
Export programs ²	1,459	2,193	1,950	1,361	-422	125	212	165	329	691
Other	-403	545	-326	-105	100	-28	3	234	477	598
Total	9,738	16,047	10,336	6,030	4,646	7,256	10,143	19,223	32,341	16,395

1/ Does not include CCC Transfers to General Sales Manager. 2/ Includes Export Guarantee Program, Direct Export Credit Program, CCC Transfers to the General Sales Manager, Market Access (Promotion) Program, starting in FY 1991 and starting in FY 1992 the Export Guarantee Program - Credit Reform, Export Enhancement Program, Dairy Export Incentive Program, & Technical Assistance to Emerging Markets, and starting in FY 2000 Foreign Market Development Cooperative Program and Quality Samples Program. 3/ Approximately \$1.5 billion in benefits to farmers under the Disaster Assistance Act of 1989 were paid in generic certificates and were not recorded directly as disaster assistance outlays. 4/ Includes cash payments only. Excludes generic certificates in FY 86-96. E= Estimated in FY 2001 Mid-Session Review Budget which was released on June 26, 2000 based on April 2000 supply & demand estimates. The CCC outlays shown for 1996-2002 include the impact of the Federal Agriculture Improvement and Reform Act of 1996, which was enacted on April 4, 1996, and FY 2000 and FY 2001 outlays include the impact of the Agricultural Risk Protection Act of 2000, which was enacted on June 20, 2000. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds). Information contact: Richard Pazdalski Farm Service Agency-Budget at (202) 720-3675 or Richard_Pazdalski@wdc.fsa.usda.gov.

Food Expenditures

Table 36—Food Expenditures

	Annual			2000	2001		Year-to-date cumulative		
	1997	1998	1999	Dec	Jan	Feb	Dec	Jan	Feb
\$ billion									
Sales ¹									
At home ²	383.8	392.3	407.3	40.1	33.6	32.0	432.5	33.6	65.6
Away from home ³	309.5	322.1	343.7	30.7	29.6	28.7	373.2	29.6	58.3
1998 \$ billion									
Sales ¹									
At home ²	392.4	392.3	397.8	37.9	31.6	30.1	415.0	31.6	61.7
Away from home ³	317.4	322.1	335.3	28.9	27.8	26.9	355.7	27.8	54.7
Percent change from year earlier (\$ billion)									
Sales ¹									
At home ²	3.8	2.2	3.8	-1.4	2.3	-1.0	5.2	2.3	0.7
Away from home ³	5.9	4.1	6.7	0.5	6.4	0.3	8.7	6.4	3.3
Percent change from year earlier (1998 \$ billion)									
Sales ¹									
At home ²	-0.2	0.0	1.4	-4.2	-0.8	-3.8	4.7	-0.8	-2.3
Away from home ³	3.0	1.5	4.1	-1.9	3.8	-2.1	8.5	3.8	0.8

-- = Not available. 1. Food only (excludes alcoholic beverages). Not seasonally adjusted. 2. Excludes donations and home production. 3. Excludes donations, child nutrition subsidies, and meals furnished to employees, patients, and inmates. *Information contact: Annette Clauson (202) 694-5389*
 Note: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food, excluding alcoholic beverages and pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced and consumed on farms and food furnished to employees; (4) this series includes all sales of meals and snacks, while PCE includes only purchases using personal funds, excluding business travel and entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," ERS Agr. Econ. Rpt. No. 575, Aug. 1987.

Transportation

Table 37—Rail Rates; Grain & Fruit-Vegetable Shipments

	Annual			2000						2001
	1998	1999	2000	Jan	Aug	Sep	Oct	Nov	Dec	Jan
Rail freight rate index ¹ (Dec. 1984=100)										
All products	113.4	113.0	114.5	113.9	114.6	114.7	115.2	115.1	115.5	115.9
Farm products	123.9	121.7	123.0	122.8	122.4	124.6	124.5	124.5	124.1	124.8
Grain food products	107.4	99.7	100.4	99.7	100.6	100.4	100.9	100.9	101.2	101.3
Grain shipments										
Rail carloadings (1,000 cars) ²	22.8	24.2	23.2	23.4	23.9	24.6	24.9	21.0	19.3	23.0
Barge shipments (mil. ton) ³	3.0	3.5	3.1	2.3	3.3	2.7	3.1	3.8	2.2	1.0
Fresh fruit and vegetable shipments ⁴										
Piggy back (mil. cwt)	0.9	0.7	0.8	0.7	0.7	0.8	0.6	0.8	0.8	0.7
Rail (mil. cwt)	1.2	1.1	1.4	1.3	1.0	1.2	1.7	2.1	2.2	1.8
Truck (mil. cwt)	42.2	45.2	45.0	39.7	42.5	39.4	40.1	39.9	42.9	37.8

P= Preliminary. R = Revised. -- = Not available. 1. Department of Labor, Bureau of Labor Statistics. 2. Weekly average; from Association of American Railroads. 3. Shipments on Illinois and Mississippi waterways, U.S. Corps of Engineers. 4. Annual data are monthly average. Agricultural Marketing Service, USDA. *Information contact: Jenny Gonzales (202) 694-5296*

Indicators of Farm Productivity

Table 38—Indexes of Farm Production, Input Use, & Productivity¹

See *Agricultural Outlook*, March 2001

Food Supply & Use

Table 39—Per Capita Consumption of Major Food Commodities¹

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	<i>Lbs.</i>									
Red meats ^{2,3,4}	112.3	111.9	114.0	112.1	114.7	115.1	112.8	111.0	115.6	117.7
Beef	63.9	63.1	62.8	61.5	63.6	64.4	65.0	63.8	64.9	65.8
Veal	0.9	0.8	0.8	0.8	0.8	0.8	1.0	0.9	0.7	0.6
Lamb & mutton	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.9	0.9
Pork	46.4	46.9	49.4	48.9	49.5	49.0	45.9	45.5	49.2	50.5
Poultry ^{2,3,4}	56.3	58.3	60.8	62.5	63.3	62.9	64.1	64.2	65.0	68.3
Chicken	42.4	44.2	46.7	48.5	49.3	48.8	49.5	50.3	50.8	54.2
Turkey	13.8	14.1	14.1	14.0	14.1	14.1	14.6	13.9	14.2	14.1
Fish and shellfish ³	15.0	14.8	14.7	14.9	15.1	14.9	14.7	14.5	14.8	15.2
Eggs ⁴	30.2	30.1	30.3	30.4	30.6	30.2	30.4	30.7	31.8	32.8
Dairy products										
Cheese (excluding cottage) ^{2,5}	24.6	25.0	26.0	26.2	26.8	27.3	27.7	28.0	28.3	29.8
American	11.1	11.1	11.3	11.4	11.5	11.8	12.0	12.0	12.2	13.0
Italian	9.0	9.4	10.0	9.8	10.3	10.4	10.8	11.0	11.3	11.8
Other cheeses ⁶	4.5	4.6	4.7	5.0	5.0	5.0	5.0	5.0	4.8	5.0
Cottage cheese	3.4	3.3	3.1	2.9	2.8	2.7	2.6	2.7	2.7	2.7
Beverage milks ²	221.8	221.1	218.2	213.4	213.6	209.8	210.0	206.8	204.6	203.8
Fluid whole milk ⁷	90.4	87.3	84.0	80.1	78.8	75.3	74.6	72.7	71.6	72.4
Fluid lower fat milk ⁸	108.5	109.9	109.2	106.6	106.0	102.6	101.7	99.8	98.6	98.2
Fluid skim milk	22.9	23.9	25.0	26.7	28.8	31.9	33.7	34.3	34.4	33.2
Fluid cream products ⁹	7.6	7.7	8.0	8.0	8.1	8.4	8.7	9.0	9.2	9.7
Yogurt (excluding frozen)	4.0	4.2	4.2	4.3	4.7	5.1	4.8	5.1	5.1	4.9
Ice cream	15.8	16.3	16.3	16.1	16.1	15.7	15.9	16.4	16.6	16.8
Lowfat ice cream ¹⁰	7.7	7.4	7.1	6.9	7.6	7.5	7.6	7.9	8.3	7.9
Frozen yogurt	2.8	3.5	3.1	3.5	3.5	3.5	2.6	2.1	2.2	2.1
All dairy products, milk equivalent, milkfat basis ¹¹	568.3	565.6	565.8	574.1	585.9	583.8	574.6	577.6	581.7	597.9
Fats and oils--total fat content	63.0	64.8	66.8	69.7	68.0	66.3	65.3	64.9	65.6	68.5
Butter and margarine (product weight)	15.3	15.0	15.4	15.8	14.7	13.7	13.5	12.8	12.8	12.9
Shortening	22.2	22.4	22.4	25.1	24.1	22.5	22.3	20.9	21.0	21.6
Lard and edible tallow (direct use)	2.2	1.8	3.5	3.4	4.2	4.3	4.8	4.1	5.2	5.7
Salad and cooking oils	25.3	26.4	27.2	26.9	26.2	26.9	26.1	28.6	27.9	29.4
Fruits and vegetables ¹²	656.0	650.2	677.5	691.4	705.6	694.3	710.8	717.9	702.4	719.0
Fruit	272.6	255.3	283.7	283.2	290.9	284.9	290.2	296.9	284.4	297.9
Fresh fruits	116.3	113.0	123.5	124.5	126.3	124.1	128.1	131.9	131.3	132.5
Canned fruit	21.0	19.8	22.9	20.7	21.0	17.5	18.8	20.4	17.4	19.6
Dried fruit	12.1	12.3	10.8	12.6	12.8	12.8	11.3	10.8	12.4	10.5
Frozen fruit	3.8	3.8	3.9	3.7	3.8	4.2	4.0	3.7	4.2	3.7
Selected fruit juices	119.0	106.0	121.9	121.3	126.6	125.9	127.8	129.3	118.8	131.0
Vegetables	383.5	394.9	393.9	408.2	414.6	409.4	420.6	421.0	418.0	421.2
Fresh	167.1	167.4	171.1	178.1	184.5	179.1	184.1	188.9	185.5	192.1
Canning	111.5	114.3	112.2	112.8	112.3	110.8	109.5	107.8	109.3	105.7
Freezing	66.8	72.6	70.9	76.0	78.4	79.9	84.6	83.0	81.8	82.5
Dehydrated and chips	31.0	32.8	31.5	33.6	31.0	31.3	34.5	33.3	33.4	32.3
Pulses	7.1	7.8	8.1	7.7	8.4	8.4	8.0	8.1	7.9	8.6
Peanuts (shelled)	6.0	6.5	6.2	6.1	5.8	5.7	5.7	5.9	5.9	6.4
Tree nuts (shelled)	2.4	2.2	2.2	2.4	2.3	1.9	2.0	2.1	2.3	2.7
Flour and cereal products ¹³	181.0	182.7	185.7	190.7	194.0	192.8	199.2	200.9	198.4	201.9
Wheat flour	136.0	137.0	138.9	143.3	144.5	141.8	148.7	149.5	146.0	148.4
Rice (milled basis)	15.8	16.2	16.7	16.7	18.1	18.9	17.8	18.4	18.9	19.4
Caloric sweeteners ¹⁴	136.9	137.9	141.2	144.5	147.4	149.8	150.7	154.0	155.1	158.4
Coffee (green bean equiv.)	10.3	10.3	10.0	9.1	8.2	8.0	8.9	9.3	9.5	10.0
Cocoa (chocolate liquor equiv.)	4.3	4.6	4.6	4.3	3.9	3.6	4.2	4.1	4.4	4.6

1. In pounds, retail weight unless otherwise stated. Consumption normally represents total supply minus exports, nonfood use, and ending stocks. Calendar-year data, except fresh citrus fruits, peanuts, tree nuts, and rice, which are on crop-year basis. 2. Totals may not add due to rounding. 3. Boneless, trimmed weight. Chicken series revised to exclude amount of ready-to-cook chicken going to pet food as well as some water leakage that occurs when chicken is cut up before packaging. 4. Excludes shipments to the U.S. territories. 5. Whole and part-skim milk cheese. Natural equivalent of cheese and cheese products. 6. Includes Swiss, Brick, Muenster, cream, Neufchatel, Blue, Gorgonzola, Edam, and Gouda. 7. Plain and flavored. 8. Plain and flavored, and buttermilk. 9. Heavy cream, light cream, half and half, eggnog, sour cream, and dip. 10. Formerly known as ice milk. 11. Includes condensed and evaporated milk and dry milk products. 12. Farm weight. 13. Includes rye, corn, oats, and barley products. Excludes quantities used in alcoholic beverages, corn sweeteners, and fuel. 14. Dry weight equivalent.

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